Determinants of Job Satisfaction of Faculty in Higher Education

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This study aims at analyzing Job satisfaction of faculty relating to management education in Andhra Pradesh State. The results of the study indicate that motivation, work itself, working conditions, working relations, organization's policies & procedures, pay and benefits, teaching performance, research performance and strengths & opportunities appear to be the significant determinants of Job satisfaction, while stress adversely impacts Job satisfaction. The magnitude of Job satisfaction differed across institutions with the highest score being in the Central University and declining in descending order among state universities, deemed to be universities, autonomous colleges, affiliated colleges and standalone AICTE Institutions. Job satisfaction exhibited variation by designation, qualification, age and experience.

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Introduction

Much of the research on Job satisfaction during the past several decades is prized by vocational psychologists for both its humanistic and financial value to organizations. Job satisfaction has been considered to be crucial for organizational success. Satisfied employees work with more commitment and exhibit higher retention rates and higher productivity. Higher levels of job satisfaction tend to lead to lower levels of absenteeism, better mental and physical health and represent public relations face of the organization. The data on job satisfaction could be helpful in "evaluating the emotional wellness and mental fitness of employees" (Spector, 1997). The research could also help institutions of higher education to design training programs to address faculty dissatisfaction. Job satisfaction is also understood in terms of its relationship with other key factors of employees like general well being, stress at work, control at work, home-work balance and working conditions (Harrison et.al, 2006).

The Problem

Job satisfaction of faculty in higher education institutions appears to be im-

portant as satisfied faculty are more committed and contribute quality inputs in teaching and research thereby enhancing the quality of student output. On the other hand dissatisfied faculty contributes negative inputs impacting in the same direction the quality of education. Hence, job satisfaction of faculty is crucial both to the students and the institution. Earlier studies attempted to study job satisfaction of teachers at different levels considering specific factor(s). Hollon & Gemmill (1976), Lewis and Bierly (1986), white (2001), Fisher (2007) and others studied job satisfaction of faculty by gender and identified factors that help/hinder job satisfaction of women. The review of a host of studies on the subject points to broad classification of factors as working conditions, experience, motivation, gender, age, rewards, etc.

Objectives

The present study is aimed at analyzing job satisfaction of faculty in higher education institutions in Andhra Pradesh with specific objectives as:

a. To identify factors impacting job satisfaction

b. To analyze the relative influence of the factors impacting job satisfaction

c. To suggest policy initiatives for the institutions to increase job satisfaction

The Sample

The present study is confined to faculty relating to management education in Andhra Pradesh State, which has the highest number of institutions offering MBA degree in India. Job satisfaction of such a large number of faculty members is expected to have significant impact on the quality of output and thereby human capital, again affecting the sectors wherever they are employed. The sampling method used is as follows:

a) Among the universities, one Central university, and three state universities in the public sector (one in each of the regions of Andhra Pradesh) and two deemed to be universities in private sector offering MBA program were selected.

b) Among the colleges affiliated to state universities-two autonomous colleges (one in Andhra and one in Telangana regions), four affiliated colleges (representing three regions) and two stand alone AICTE institutions (one in Andhra and second in Telangana region) were selected as representative sample for the state of Andhra Pradesh.

c) All the population in each selected institution were taken and a predesigned questionnaire was canvassed to collect data on job satisfaction.

The type of institutions and the total population in each selected institution are presented in Table 1. A pre-designed questionnaire was canvassed among the faculty and data were collected during July – December, 2011.

Several factors may influence job satisfaction and those factors that are quan-

tifiable are considered for the analysis. A multiple regression model of the following form is employed to identify the factors that determine job satisfaction.

The Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + e_t$$

Y = Job satisfaction
X_1 = Motivation
X_2 = Work itself
X_3 = Working conditions
X_4 = Working relations
X_5 = Organization's policies & pro cedures
X_6 = Pay & benefits
X_7 = Personal growth
X_8 = Stress
X_9 = Coping strategies
X_{10} = Teaching performance
X_{11} = Research performance
X_{12} = Strength &opportunities
X_{13} = Weakness & threats
e_t = error term
β_i = regression coefficients to be estimated (i = 0, 1……..)

Table 1 The Sample

S.No.	Sector	Type of Institution	Name of the Institution	Place	No. of Faculty Members	Year of Establish-Ment
1.	Govern-ment	Central University	University of Hyderabad	Hyderabad	16	1970
2.	Govern-ment	State University	Andhra University	Visakhapatnam	20	1926
3.	Govern-ment	State University	Osmania University	Hyderabad	19	1916
4.	Govern-ment	State University	S.V. University	Tirupathi	22	1954
5.	Private	Deemed University	GITAM University	Visakhapatnam	49	1987
6.	Private	Deemed University	KL University	Vijayawada	29	2007
7.	Private	Autonomous College	Gayatri	Visakhapatnam	23	1980
8.	Private	Autonomous College	SIT	Hyderabad	10	1998
9.	Private	Affiliated College	KMM	Tirupathi	14	2003
10.	Private	Affiliated College	MRPG	Vizianagaram	20	1987
11.	Private	Affiliated College	RIMS	Tirupathi	27	1994
12.	Private	Affiliated College	ST. ANN'S	Hyderabad	09	1983
13.	Private	AICTE Institute	BADRUKA	Hyderabad	20	1950
14.	Private	AICTE Institute	IIAM	Visakhapatnam	10	1987
		Total			288	

Among the above factors, only stress (X_8) and weaknesses and threats(X_{13}) are expected to exert a negative relationship on job satisfaction, while all the

other factors are hypothesized to have a direct relationship with job satisfaction. The analysis has been carried out at the aggregate and disaggregate levels. The disaggregated level analysis has been carried out with respect to qualification, designation, age, experience and institution in which the faculty are working.

Measurement of the Variables

a) X_1 - Overall motivating factors in which seventeen motivators were identified consisting of achievement, recognition and appreciation, responsibility, nature of work, relationships, salary, supervision, working conditions, job security, promotional opportunities, opportunities to use ability fully, working hours and physical conditions, adequate authority and control, institution's status, open communication, participatory decision making and work autonomy. The levels of satisfaction of the faculty are measured on a five point scale from 1to 5 with scores of 1=fully dissatisfied, 2 =dissatisfied, 3 = neutral, 4 = satisfied and 5 = highly satisfied. Mean score of all the motivators is used as the magnitude of the motivating factor (x_1). The variable is expected to bear a positive relationship.

b) X_2 - In measuring the factor work itself, sixteen statements are used (A_1 to A_{16}) and measured on a 5 point scale as stated already. Mean score is taken for denoting the magnitude of this variable x_2, which is expected to bear a positive relationship.

c) X_3 - Twelve statements are given (B1 to B12) and measured on a 5 point scale. Mean score is taken as the magnitude of this variable (X_3). The expected sign is positive.

d) X_4 is measured with the help of nine statements (C_1 to C_9). Mean score is calculated using 5 point scale and that mean score denotes working relations (X_4). The variable is expected to exhibit positive relationship.

e) Organization's policies & procedures (X_5) are measured with the help of twenty nine statements (D_1 to D_{29}) and aggregated to obtain mean score for the determinant X_5. The expected sign could be positive or negative.

f) Seven statements (E_1 to E_7) are given to measure X_6 – pay / fringe benefits or appreciation and recognition. Mean score for the variable is obtained from the responses of the faculty on a five point scale. The variable is expected to bear positive relationship.

g) The factor X_7 – Personal growth / promotion opportunities / job security / retirement benefits / gender equality is measured with the help of eight statements (F_1 to F_8). Their mean score is used to denote X_7. The variable is expected to bear theoretically positive relationship.

h) X_8 – Stress is measured by using thirteen statements (G_1 to G_{13}). Mean score is used to measure this variable. The sign is expected to be negative.

i) X_9 – In measuring coping strategies, thirteen statements (H_1 to H_{13}) are used and their mean score is obtained with the help of a 5- point scale. The variable is expected to impact job sat isfaction positively.

j) X_{10} – Teaching performance is measured using twelve statements (I_1 to I_{12}). Mean score is used to measure this variable. The expected sign is positive.

k) X_{11} – Research performance is measured with the help of twelve statements (J_1 to J_{12}) and the responses are recorded on a 5- point scale. Mean score is obtained and is used as the magnitude of this variable (X_{11}). It is expected to bear positive sign impacting job satisfaction.

l) X_{12}-SWOT analysis of the faculty is made to assess their impact on Job satisfaction. X_{12} on strengths and opportunities is measured using fifteen statements. Their mean score is taken as the magnitude of the variable. It is expected to bear a positive relationship.

m) X_{13} -Weaknesses and threats are measured with the help of twelve statements. Mean score is used to measure the variable. It is expected to bear a negative relationship.

The Results

The results of the estimated regression equation of job satisfaction at the aggregate level are presented in Table 2. The coefficient of multiple determination ($\bar{R}^2$) is 0.93 and as indicated by F value, it is found to be significant at one percent probability level. This indicates that all the explanatory variables put together are explaining about 93 percent of the variation in the dependent variable i.e. job satisfaction. The zero order correlation matrix (Table 3) indicates that multi-collinearity[1] is not a serious problem and hence the results are analyzed.

The estimated regression coefficients except those associated with working relations (X_4) and organization policies and procedures (X_5) have registered the expected signs and most of them are found to be significantly different from zero at probability levels ranging from one to ten percent. Though the coefficients associated with X_4 and X_5 are found to be negative, they are not significantly different from zero even at 10% probability level. The results also indicate that motivation (X_1), work itself (X_2),working conditions(X_3), working relations (X_4), organization's policies & procedures (X_5), pay & benefits (X_6), teaching performance (X_{10}), research performance (X_{11}) and strengths & opportunities (X_{12}) appear to be the significant determinants of Job satisfaction, while stress (X_8) adversely impacts job satisfaction.

[1] According to Schultz T.W, multi-collinearity is not a serious problem if the correlation coefficient between any two explanatory variables is less than 0.80. According to Klein L.R, the multi-collinearity is not a serious problem if the correlation coefficient between any two independent variables is less than the coefficient of multiple determination.

Table 2 Determinants of Job Satisfaction - Aggregate Level

Coefficients	Value
Constant	0.93(7.08)
X_1	0.02*(2.54)
X_2	0.27***(2.14)
X_3	0.18*(3.37)
X_4	0.15*(3.01)
X_5	0.25*(0.55)
X_6	0.13*(3.06)
X_7	0.09(1.07)
X_8	-0.28**(2.39)
X_9	0.11(0.15)
X_{10}	0.14*(2.86)
X_{11}	0.19*(5.14)
X_{12}	0.61**(2.38)
X_{13}	-0.04(0.61)
$\overline{R}^2$	0.93
F – Value	315.79

Figures in the brackets are t-values
* Significant at one percent level
** Significant at five percent level
*** Significant at ten percent level

Job Satisfaction by Institution

Determinants of job satisfaction of the faculty by institution has been carried out. The institutions are categorized as Central universities, state universities, deemed universities, autonomous colleges, affiliated colleges of the state universities and AICTE institutions. It is hypothesized that the levels of job satisfaction will be higher in central universities and moves in a descending order along the institutions as stated above. Further, to test this hypothesis, dummy variable technique has been employed. Altogether seven intercept dummies, as defined below, are used.

Table 3 Zero Order Correlation Matrix

Variables	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}
Y	1.000													
X_1	0.556	1.000												
X_2	0.691	0.736	1.000											
X_3	0.248	-0.242	-0.592	1.000										
X_4	-0.304	-0.668	-0.350	-0.354	1.000									
X_5	-0.546	-0.522	-0.499	0.318	0.487	1.000								
X_6	0.750	-0.527	-0.605	0.198	0.310	.478	1.000							
X_7	0.667	-0.507	-0.566	0.274	0.478	.617	0.687	1.000						
X_8	-0.783	-0.526	-0.741	0.406	0.309	.654	0.526	0.685	1.000					
X_9	0.546	-0.579	-0.589	-0.111	0.410	0.004	0.497	0.112	0.547	1.000				
X_{10}	0.201	-0.380	-0.135	-0.251	0.517	-0.072	-0.394	-0.272	-0.215	0.366	1.000			
X_{11}	0.602	-0.330	-0.525	0.515	-0.102	.255	0.576	0.363	0.583	0.460	-0.220	1.000		
X_{12}	0.000	-0.351	-0.324	0.480	0.022	.330	-0.210	0.182	-0.183	-0.380	0.087	-0.111	1.000	
X_{13}	-0.491	-0.096	-0.028	-.204	-0.035	0.003	0.244	0.123	-0.031	0.058	-0.347	-0.139	0.152	1.000

D_1 = 1, if Andhra University
= 0, Otherwise
D_2 = 1, if Osmania University
= 0, Otherwise
D_3 = 1, if Sri Venkateswara University
= 0, Otherwise
D_4 = 1, if Deemed Universities
= 0, Otherwise
D_5 = 1, if Affiliated Colleges
= 0, Otherwise
D_6 = 1, if Autonomous Colleges
= 0, Otherwise
D_7 = 1, if AICTE Institutions
= 0, Otherwise

The results of the estimated regression equations are presented in Tables 4 and 5. The results indicate that the coefficients of multiple determination among different institutions vary between 0.79 and 0.95 and all the coefficients are statistically significant at one percent probability level. This implies that all the explanatory variables could explain about 79 to 95 percent of the variation in the dependent variable i.e. Job satisfaction. Most of the coefficients have registered the expected signs and found to be statistically different from zero at probability levels ranging from 1 to 10 per cent. The coefficients associated with X_4 and X_5 turned to be negative. However these two coefficients are found to be not significant even at 10 percent probability level. This is also supported by the coefficients of dummy variables. All the coefficients of the intercept dummies except that associated with Andhra University registered negative signs and found to be significant at probability levels ranging from one to ten percent. However, the coefficient associated with Andhra University dummy variable, though registered a positive sign, is found to be not significant even at ten percent probability level. Thus, these results validate the descending order of the levels of job satisfaction from Central university to AICTE standalone institutions.

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Determinants of Job Satisfaction by Designation

The attempt here has been to analyze the factors determining levels of job satisfaction of management faculty by designation. It is hypothesized that job satisfaction level will be higher among assistant professors and will decline as we move to higher designation. To capture this effect, two dummy variables D1 and D2 as defined below are used in addition to the 13 variables as specified earlier.

D_1 = 1, if professor
= 0, otherwise
D_2 = 1, if associate professor
= 0, otherwise

The results of the estimated regression equations are presented in Table 6. All the explanatory variables put together are explaining about 91 to 95 per cent of the variation in the dependent variable i.e. job satisfaction. The coefficient of multiple determination in all the estimated models is found to be significant at one percent probability level. Most of the coefficients have registered the expected signs and are found to be significantly different from zero at probability levels ranging from one to ten percent. Here also the coefficients associated with X_4 and X_5 have registered negative

Table 4 Institution-wise Determinants of Job Satisfaction

Coeff-icients	Central University	State Universities	Deemed Universities	Autonomous Colleges	Affiliated Colleges	AICTE Institutes
Constant	0.80	0.71	0.76	0.74	0.75	0.69
	(13.85)	(6.89)	(5.67)	(3.98)	(4.17)	(3.76)
X_1	0.05***	0.01**	0.023***	0.077*	0.004	0.013
	(2.14)	(2.59)	(2.16)	(2.99)	(1.14)	(1.39)
X_2	0.31*	0.27*	0.21*	0.19*	0.17***	0.20*
	(3.74)	(3.49)	(0.19)	(2.99)	(1.98)	(3.19)
X_3	0.26*	0.19*	0.15*	0.17*	0.14*	0.16*
	(4.13)	(3.71)	(0.86)	(4.10)	(3.97)	(3.48)
X_4	0.05	-0.005*	0.003	0.001	0.016	-0.009
	(1.31)	(2.96)	(0.79)	(0.69)	(1.27)	(0.89)
X_5	-0.012	-0.103	-0.113	0.08*	-0.017	-0.017
	(1.16)	(1.69)	(1.193)	(2.79)	(0.87)	(1.32)
X_6	0.21*	0.19*	0.17*	0.14*	0.12*	0.15*
	(3.79)	(4.16)	(3.79)	(4.39)	(3.54)	(3.29)
X_7	0.15	0.12	0.107	0.093	0.08	0.114
	(0.24)	(0.39)	(0.79)	(0.11)	(0.97)	(0.15)
X_8	-0.11	-0.14	-0.16	-0.21*	-0.19*	-0.176*
	(1.76)	(3.34)	(3.14)	(4.11)	(3.47)	(3.27)
X_9	0.19	0.16	0.13*	0.13	0.11	0.09
	(0.47)	(0.99)	(3.14)	(0.91)	(0.87)	(3.91)
X_{10}	0.23	0.21*	0.17*	0.15*	0.15*	0.13
	(0.96)	(3.59)	(3.29)	(3.19)	(4.11)	(3.97)
X_{11}	0.28*	0.16*	0.18*	0.17	0.15*	0.14*
	(4.97)	(3.56)	(3.44)	(0.98)	(3.34)	(3.77)
X_{12}	0.73*	0.57*	0.49*	0.45*	0.37*	0.42*
	(3.14)	(3.74)	(4.14)	(3.94)	(4.68)	(3.81)
X_{13}	-0.003	0.012*	-0.016	-0.019	-0.102	-0.015
	(0.51)	(0.71)	(0.19)	(0.61)	(0.98)	(0 .76)
$\overline{R}^2$	0.95	0.89	0.87	0.83	0.79	0.85
F-Value	54.39	39.65	41.49	39.75	51.37	44.65

Figures in brackets are t-values *Significant at one percent level
Significant at five percent level * Significant at ten percent level

signs, but none of them is found to be significant even at 10 per cent probability level. The coefficients associated with the two dummy variables have registered negative signs and both are found to be significantly different from zero at five percent probability level. This indicates that job satisfaction is significantly higher among Assistant Professor category relative to either Associate Professor or Professor categories. Further, the magnitude of these coefficients also reveals that the Job satisfaction is also significantly higher among Associate Professors as compared to Professors.

Job satisfaction is also significantly higher among Associate Professors as compared to Professors.

Table 5 Coefficients & t-values

	Coefficients	t-value
Constant	0.90	5.17
X_1	0.03*	3.19
X_2	0.28	2.76
X_3	0.16*	3.98
X_4	-0.17	1.11
X_5	0.08*	2.97
X_6	0.15*	4.19
X_7	0.11	1.37
X_8	-0.25*	3.11
X_9	0.14	1.18
X_{10}	0.12*	3.79
X_{11}	0.21*	4.07
X_{12}	0.63*	3.67
X_{13}	0.06	0.78
D_1	0.009	1.31
D_2	0.007***	2.09
D_3	0.10**	2.31
D_4	0.104***	1.98
D_5	0.106*	2.93
D_6	0.113*	3.17
D_7	0.109**	2.35
$\overline{R}^2$	0.94	
F - Value	113.76	

* Significant at one percent level
** Significant at five percent level
*** Significant at ten percent level

Job Satisfaction by Qualification

In this analysis, the sample faculty members are divided into two categories, viz., those with Ph.D. and those without Ph.D. In addition to independent regression equation to these categories, a pooled regression equation with intercept dummy (D_1) as defined below is estimated to capture the effect of qualification on job satisfaction.

D_1=1, if holding Ph.D.; 0, otherwise

The results of the estimated functions are shown in Table 7. The results indicate that the estimated equations are better fit as per the values of $\overline{R}^2$. All the explanatory variables put together are explaining about 92 - 95 per cent of the variation in the dependent variable and the coefficient of multiple determination is statistically significant at one percent probability level. All the coefficients associated with different explanatory variables except those associated with X_4 and X_5 have registered the expected signs with a prior theoretical logic and most of them are found to be significantly different from zero at probability levels ranging from one to ten percent. The coefficient associated with D_1 is found to be positive and significantly different from zero at one percent probability level. This implies that job satisfaction is significantly higher among faculty with Ph.D. as compared to those without Ph.D.

Job satisfaction is significantly higher among faculty with Ph.D. as compared to those without Ph.D.

Age-Wise Determinants of Job satisfaction

The levels of job satisfaction among management faculty may vary in accordance with their age. Generally, young faculty members may have an inclination and higher motivation towards teaching and research and hence may have higher level of Job satisfaction. As age advances, in addition to the academic responsibilities, they may have to devote their time and attention on their family and wards, and this may result in declining levels of job satisfaction. Hence it is hypothesized that as age advances, level of job satisfaction will

Table 6 Designation-wise Determinants of Job satisfaction

Coefficients	Professor	Associate Professor	Assistant Professor	Pooled
Constant	0.93(4.37)	0.86(3.98)	0.79(5.17)	0.89(6.38)
X_1	-0.06(0.78)	0.103(1.21)	0.082(1.39)	0.07***(2.21)
X_2	0.21**(2.46)	0.26*(2.97)	0.31*(3.75)	0.29*(3.13)
X_3	0.13*(2.96)	0.12*(3.43)	0.18**(2.27)	0.15*(3.68)
X_4	-0.21(1.53)	-0.18(0.69)	-0.13(1.08)	-0.15(1.27)
X_5	0.17(1.39)	0.07(1.21)	0.05*(2.81)	0.09(1.08)
X_6	0.11*(3.26)	0.15*(4.11)	0.15*(3.87)	0.14*(3.76)
X_7	0.06(0.97)	0.10(0.35)	0.13(0.51)	0.11(0.13)
X_8	-0.31*(3.61)	-0.31*(4.32)	-0.237*(3.11)	-0.27(0.89)
X_9	0.08(0.91)	0.11(0.43)	0.13(0.97)	0.11(0.91)
X_{10}	0.11*(3.11)	0.14**(2.37)	0.17**(2.41)	0.16**(2.49)
X_{11}	0.14*(3.77)	0.18*(4.19)	0.206*(3.89)	0.18*(4.31)
X_{12}	0.47*(4.17)	0.55*(3.19)	0.63*(3.66)	0.59*(3.31)
X_{13}	-0.091(0.33)	-0.076*(0.71)	-0.032(0.31)	-0.05(0.19)
D_1				-0.119**(2.37)
D_2				-0.008**(2.41)
$\overline{R}^2$	0.93	0.91	0.95	0.95
F - Value	87.65	49.79	91.69	136.79

Figures in brackets are t-values
* Significant at one percent level
** Significant at five percent level
*** Significant at ten percent level

decline. The analysis has been carried out by dividing the sample faculty into three age groups, viz., below 35 years, 35-45 years and above 45 years. Regression equations as per the model specified earlier are estimated for each age group separately. To capture the effect of age on job satisfaction, a pooled regression equation with two dummy variables D_1 and D_2 as specified below, in addition the thirteen variables have been estimated and the results are presented in Table 8.

D_1 = 1, if in 35-45 years of age
= 0, otherwise
D_2 = 1, if above 45 years of age
= 0, otherwise

The coefficients of multiple determination in all the equations vary between 91 per cent and 96 per cent. The calculated F- values indicate that these coefficients are significantly different from zero at one percent probability level. All the explanatory variables put together are explaining 91 to 96 per cent of variation in the levels of job satisfaction of management faculty.

As experience increases, in addition to the academic responsibilities, they may be assigned with non-academic/administrative responsibilities and this may result in declining levels of Job satisfaction. The analysis has been carried out by dividing the sample faculty into three groups, viz., below 10 years experience, 10-20 years experience, and above 20 years experience. Regression equations as per the model specified earlier are estimated for each group separately. Fur-

Table 7 Qualification-wise Determinants of Job satisfaction

Coefficients	With Ph.D.	Without Ph.D.	Pooled
Constant	0.93	0.79	0.87
	(4.13)	(5.39)	(3.88)
X_1	0.06	0.018	0.04
	(0.88)	(1.49)	(1.21)
X_2	0.29	0.27*	0.29*
	(0.79)	(2.61)	(3.17)
X_3	0.17	0.14*	0.15*
	(0.39)	(4.07)	(4.11)
X_4	-0.07	-0.11	-0.09
	(1.61)	(1.29)	(0.79)
X_5	0.11	0.13	0.11
	(1.57)	(0.87)	(1.48)
X_6	0.139*	0.126*	0.13*
	(3.11)	(2.89)	(3.81)
X_7	0.131	0.008	0.107
	(0.81)	(0.31)	(0.47)
X_8	-0.24	-0.27*	-0.26*
	(0.11)	(2.89)	(2.79)
X_9	0.131	0.094	0.12
	(0.99)	(0.76)	(0.37)
X_{10}	0.15*	0.14*	0.15*
	(2.97)	(4.16)	(3.98)
X_{11}	0.18	0.17*	0.17*
	(4.98)	(3.71)	(4.37)
X_{12}	0.60*	0.57*	0.59*
	(5.72)	(3.29)	(3.71)
X_{13}	-0.033	-0.074	-0.06
	(0.16)	(0.88)	(0.69)
D_1			0.17*
			(5.17)
$\bar{R}^2$	95	92	94
F – Value	79.61	67.46	91.37

Figures in brackets are t-values
* Significant at one percent level
** Significant at five percent level
*** Significant at ten percent level

Table 8 Age-wise Determinants of Job Satisfaction

Coefficients	Below 35	35-45	Above 45	Pooled
Constant	0.91	0.87	0.83	0.89
	(3.16)	(6.39)	(4.19)	(4.16)
X_1	0.07	0.08	0.02	0.05
	(1.51)	(0.58)	(1.31)	(1.49)
X_2	0.31*	0.27*	0.22*	0.27*
	(3.11)	(4.33)	(3.38)	(4.11)
X_3	0.15*	0.13*	0.11*	0.15*
	(3.17)	(2.89)	(4.45)	(4.71)
X_4	-0.06*	0.11	0.09**	0.19**
	(3.31)	(1.19)	(2.63)	(2.87)
X_5	0.11	0.16**	-0.12**	0.13***
	(0.64)	(2.37)	(2.51)	(2.29)
X_6	0.19*	0.16*	0.13*	0.16*
	(4.51)	(3.79)	(2.81)	(3.17)
X_7	0.13	0.11	0.14	0.13***
	(0.11)	(0.47)	(0.89)	(1.99)
X_8	-0.22*	0.27*	0.009**	-0.25*
	(2.89)	(3.15)	(2.47)	(2.76)
X_9	0.15	0.08	0.11	0.11
	(0.49)	(0.18)	(0.58)	(0.81)
X_{10}	0.17*	0.15*	0.12*	0.15*
	(4.51)	(3.71)	(5.18)	(3.97)
X_{11}	0.204*	0.183*	0.181*	0.19*
	(3.93)	(2.97)	(4.28)	(6.11)
X_{12}	0.65*	0.55*	0.58*	0.61**
	(4.37)	(3.94)	(2.87)	(2.89)
X_{13}	-0.032	-0.044	-0.052	-0.04
	(0.51)	(0.08)	(0.48)	(0.87)
D_1				-0.109*
				(3.19)
D_2				-0.121*
				(4.61)
$\bar{R}^2$	0.96	0.91	0.93	0.95
F – Value	113.79	39.65	57.41	121.49

Figures in brackets are t-values
* Significant at one percent level
** Significant at five percent level
*** Significant at ten percent level

Table 9 Experience-wise Determinants of Job Satisfaction

Coefficients	Below 10	10 - 20	Above 20	Pooled
Constant	0.93	0.82	0.86	0.90
	(4.98)	(6.18)	(3.67)	(3.71)
X_1	0.024	0.008*	0.006	0.01
	(1.18)	(2.79)	(1.34)	(0.79)
X_2	0.311	0.253*	0.242*	0.27*
	(0.68)	(2.79)	(3.17)	(3.88)
X_3	0.16	0.14*	0.15*	0.16*
	(0.67)	(4.97)	(2.91)	(5.11)
X_4	0.053**	-0.082**	-0.091	-0.07
	(2.45)	(2.63)	(0.88)	(1.31)
X_5	0.103	0.142***	0.154**	0.14**
	(0.57)	(2.18)	(2.33)	(2.37)
X_6	0.182*	0.168*	0.173*	0.17*
	(6.29)	(5.18)	(4.73)	(4.61)
X_7	0.123*	0.093	0.104	0.11
	(0.11)	(0.34)	(0.40)	(0.37)
X_8	-0.221*	-0.252*	0.007	-0.24
	(3.68)	(0.17)	(0.83)	(0.17)
X_9	0.131*	0.114	0.103	0.11
	(0.69)	(0.09)	(0.27)	(0.39)
X_{10}	0.153*	0.133*	0.142*	0.14*
	(5.61)	(6.01)	(3.71)	(4.19)
X_{11}	0.154*	0.193*	0.184*	0.18*
	(3.11)	(4.01)	(2.79)	(3.79)
X_{12}	0.671*	0.613*	0.622*	0.64*
	(3.37)	(2.81)	(4.15)	(5.17)
X_{13}	-0.043	-0.062	-0.071	-0.06
	(0.16)	(0.97)	(0.46)	(0.17)
D_1				-0.097**
				(2.37)
D_2				-0.112**
				(2.31)
$\bar{R}^2$	0.95	0.93	0.93	0.94
F – Value	67.65	147.49	49.81	119.65

Figures in brackets are t-values
* Significant at one per cent level
** Significant at five per cent level
*** Significant at ten percent level

ther, to capture the effect of experience on job satisfaction, a pooled regression equation with two dummy variables D_1 and D_2 as specified below, in addition to the thirteen variables has been estimated and the results are presented in Table 9.

D_1 = 1, if 10-20 years of experience
= 0, otherwise
D_2 = 1, if above20 years of experience
= 0, otherwise

The coefficients of multiple determination in all the estimated equations vary between 93 per cent and 95 per cent. The calculated F- values indicate that these coefficients are significantly different from zero at one percent probability level. This implies that, all the explanatory variables put together are explaining 93 - 95 per cent of variation in the levels of job satisfaction of management faculty. All the estimated coefficients with few exceptions have registered the expected signs and most of them are found to be significantly different from zero at probability levels ranging from one to ten percent. Interestingly, the coefficients associated with stress variable (X_8) are found to be positive and significant at one percent probability level of significance in the case of faculty with more than 20 years of experience. More over the coefficients associated with the two dummy variables have registered negative signs and both of them are significantly different from zero at five percent probability level.

All the coefficients with few exceptions have registered the expected signs and most of them are found to be significantly different from zero at probability levels ranging from one to ten percent. Interestingly, the coefficient associated with stress variable(X_8) is found to be positive and significant at 5 percent probability level in the case of faculty of 35-45 years of age and above 45 years of age. Further, the coefficients associated with the two dummy variables have registered negative signs and both of them are significantly different from zero at one percent probability level. Further, the magnitude of the coefficient of D_1 is lower than that of D_2. Thus, these results indicate a higher level of job satisfaction among younger faculty relative to the older aged faculty.

These results indicate a higher level of job satisfaction among younger faculty relative to the older aged faculty.

Job Satisfaction by Experience

The levels of job satisfaction among management faculty may vary in accordance with their experience. Generally, faculty members with less experience may have an inclination and higher motivation towards teaching and research and learning and hence may experience a higher level of job satisfaction.In addition, the magnitude of the coefficient of D_1 is lower than that of D_2. Thus, these results indicate a higher level of job satisfaction among management faculty with less experience (below 10 years of experience), and levels of job satisfaction among management faculty are declining as experience increases.

Conclusions & Implications

Job satisfaction of faculty is considered to be crucial for enhancement of quality of higher education, thus shaping and determining significantly the productivity of generations of students. The public face of the institutions along with their recognition goes up with satisfied faculty. Evidently, the significant determinants of job satisfaction are motivation, work itself, working conditions, working relations, organization's policies and procedures, pay and benefits, teaching and research performance and strengths and opportunities. However, stress adversely impacts job satisfaction. The magnitude of job satisfaction differed across institutions. It is the highest in Central university and significantly declined in descending order among state universities, deemed to be universities, autonomous colleges, affiliated colleges and standalone AICTE institutions.

Job satisfaction is significantly higher among Assistant Professors relative to Associate Professors and also among Associate Professors relative to Professors. Further, job satisfaction is significantly higher among faculty with Ph.D. compared to those without Ph.D. Higher level of job satisfaction is also evident among younger faculty which appears to be significantly declining as age advances. Similarly, job satisfaction recorded to be significantly declining with experience indicating inverse relationship.

The inferences of the study could imply that institutions of higher education have to adopt policies that enhance job satisfaction among faculty as they crucially determine the quality of education and student (customer) satisfaction. Faculty have to be paid sixth pay UGC scales, which are presently paid by only universities. Faculty need to be incentivized for research performance in terms of cash / appreciation or other forms of recognition. Teaching performance needs to be appreciated. Institutions have to ensure adequate/better working conditions and academic heads have to ensure prevalence of good working relations among faculty. Institutions should factor polices so as to motivate and enhance job satisfaction of faculty at Professor level such that they lead and assume leadership further enhancing the brand image of the institution, ensuring customer satisfaction and sustaining quality of higher education.

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