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# Job Satisfaction Analysis of Faculty Members in Public Sector Engineering Universities: An Empirical Investigation

AMEER ALI SHAHANI\*, ANWARUDDIN TANWARI\*, HUSSAIN BUX MARRI\*,  
MUKHTIAR ALI KORAI\*, AND MUHAMMAD ALI KHAN\*

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## ABSTRACT

Most of the researchers have conducted study on the job satisfaction of the faculty members in Non-Engineering Universities only few have paid their attention in the Public Sector Engineering Universities. This study is the first attempt towards the research on faculty members' job satisfaction in public sector engineering universities of Sindh, Pakistan. The focus of this research is to assess the faculty members' job satisfaction on the perspectives of different factors i.e. compensation, research and technology, management style, recognition, working environment, in-service teaching training. The data was collected and analyzed using SPSS version 17.0 on five point likert scale. Regression, Correlation and ANOVAs (Analysis of Variance) tests were conducted. Results showed that faculty members of the public sector engineering universities have lower job satisfaction. The finding suggested that, the study is useful for the management of universities in order to rectify the areas of dissatisfaction and to tackle the issues related to the faculty members regarding their job satisfaction.

**Key Words:** Jobs Satisfaction, Faculty Members, Public Sector Engineering Universities, Empirical Data Analysis.

## 1. INTRODUCTION

The faculty members who are working in the public or private sector universities brings with them certain motives, drives and wants which affects directly or indirectly on their performance [1]. Hence, universities are also realizing the justified needs and wants of the faculty members at the top most priority and facilitate them so that they should contribute in achieving the goal of academia [2].

Simultaneously, HEC (Higher Education Commission) is also emphasizing on universities to improve the quality of education through the continuous enhancement of knowledge, training and education and ethical values of

faculty members in order to contribute in the socio economic development of the country. The satisfaction is to be affected on what the individuals can acquire or seek from the paid job. In addition, faculty members are bound to lead research and publish their research findings. This may consequence in state of mind, stress and unhappiness. However, some of them leave if they could not bear the situation. To conquer issues, factors of job satisfaction must be studied effectively to make sure that faculty members are happy with their profession. There are several personal and situational factors such as compensation, management style, recognition and comfortable environment at work places which directly

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\* Department of Industrial Engineering & Management, Mehran University of Engineering & Technology, Jamshoro.

impact on performance of employees towards the job to be paid [1]. Assessment the level of Job satisfaction of faculty members is much more complex due to having differences in gender, age and the differences in internal equity and external equity [3].

Ellickson [4] determined the impact of factors such as adequate equipment, required resources, training opportunities and an equitable workload all influence on the faculty members job satisfaction. Chen [5] measured the job satisfaction of the teachers in private university in China by using six satisfaction factors such as with organization vision, management style, result feedback and motivation, pay, benefits and work environment, on the basis of these results showed that teachers are satisfied and factors have significant impact on teachers performance.

Vuong and Duong [6] also used some critical success factors of the job satisfaction in their research which was carried out in the Vietnam University such as in-service training, work autonomy, working relations, teaching load, research pressure, leadership style, campus landscape and found their impact satisfactory on the level of faculty members job satisfaction. Callister [7] described the amount of variance in the faculty member's overall level of job satisfaction. He further achieved results and found that there are three factors such as recognition, supervision, and working relationships have more influence of variance among faculty members' overall level of job satisfaction. This study have paid their attention to conduct the research on the Job satisfaction of faculty members in the general, medical universities and evidences showed that few have conduct the research in the private sector engineering universities of Sindh province. The trend is still unchanged and the research on job satisfaction of faculty members of public sector engineering universities of Sindh province is still unaddressed. It also

seems through the personal visits and long discussions with higher authorities and the comments received during the preliminary survey that highly qualified, competent and productive faculty members going to quit their jobs and moving to other countries due to having less job satisfaction in their own country i.e. Pakistan.

Hence, the faculty member's turnover to other rich countries is going to be increased with the high rate which is the major challenge for the Public sector engineering universities as well as for the HEC. Hence focus of this research is to investigate the faculty members' job satisfaction in the perspective of Public sector engineering universities.

## **2. SCOPE OF RESEARCH**

The increased global competition in higher education sectors boost up the universities towards economic development by producing high quality and effective output.

At the same time, engineering universities are facing the problems regarding the job satisfaction of faculty members which may ultimately be the cause of turnover of highly qualified, competent and productive faculty members to organizations which is not only the loss of educational units but also the loss of country. Therefore, job satisfaction of faculty members is the most crucial factor in order to avoid turnover of highly qualified, competent and productive faculty members. This research will help to minimize faculty turnover to other organizations through identifying the root causes which are cause of faculty turnover. Also analyzing the critical success factors of faculty member's job satisfaction.

The research will provide guidelines for the management to improve the working environment of faculty members by rectifying the areas of dissatisfaction. This research

will also cover the deficiencies of literature regarding job satisfaction of faculty members in different perspectives of Engineering Universities of Sindh, Pakistan.

### **3. RESEARCH METHODOLOGY**

In the initial phase, the review of literature was completed, key authors' investigation regarding factors of job satisfaction, current state of research, findings and gaps about the research were found. After having the sound literature research design was formulated in the shape of questionnaire. The scale used in the questionnaire was 5 points likert scale. The questionnaire designed for the research contains two sections. The section A contains demographic information about respondents and section B contains the main constructs and sub constructs. After designing of questionnaire, Preliminary survey was conducted and data was collected through employing five questions in all four engineering universities selected. The suggestions column was added in the questionnaire as the respondents may easily put their suggestions to make the questionnaire more effective for main survey. The data gathered during the preliminary survey was analyzed and prototype results were generated to check the reliability and validity of the data. In main survey all of valuable suggestions of respondents were incorporated in the final questionnaire and employed to collect the data. In the main survey all efforts were made to set the reliability and validity to collect data and sampling errors were reduced to obtain more accurate results. After having sufficient data, the research was hypothesized and further it was processed to generate the results by applying the statistical techniques using SPSS Software version 17.0.

Following null hypotheses are mentioned below were tested:

(1) H-I: The key factors identified from the reliable sources and have influence on the Job satisfaction

HI-I: The key factors have the influence on the demographics of faculty members up to significance level.

H-III: The indicators of job satisfaction which shows the level of job satisfaction should be significant.

### **4. EMPIRICAL DATA ANALYSIS**

Descriptive statistics were used to calculate the frequencies and percentage of demographic data. In order to have a better understanding and interpretation of the demographic data, varieties of tables were used and are depicted in tables. The research study was survey based and survey was conducted in December 2015. The 221 sample sizes of questionnaires were distributed among faculty members of four public sector engineering universities of Sindh. In return 204 questionnaires were filled correctly. The questionnaire was designed to collect information on six factors of job satisfaction such as compensation, research and technology, management style, recognition, working environment and in-service teaching training. Obtained data was summed and averaged because there were various sub factors in the questionnaire. In the case of negative response scores was carrying in reverse order.

#### **4.1 Reliability**

Cronbach's Alpha has been used to examine the internal consistency of multiple factors i.e. satisfiers of the job satisfaction. The internal consistency of the factors i.e. satisfiers be reliable when Cronbach's Alpha value should be greater than 0.7(Hair et. al. [8]). The detailed results are shown in **Table 1**.

## 4.2 Validity of Data

The data received from respondents may not be fully accurate because some of the respondents do not understand the technical questionnaires rightly. Amongst filled questionnaires some were found without concentration and few may be biased. Therefore, for the valid data it is necessary that tolerance for the constructs to which it has been collected should be greater than 0.1 and VIF (Variance Inflation Factor) should be less than 10. Accordingly the VIF achieved values are reciprocal to that of the tolerance. The results have been shown in Table 2.

## 4.3 Normality of Data

The collected data is said to be normally distributed when the data will be in the limits of skewness and kurtosis curves. This test will ensure that data has been normally distributed, when the skewness is within +1 and -1 limits and the kurtosis results are in the range of +3 and -3. The detailed results of skewness and kurtosis tests are shown in Table 3.

## 5. RESULTS AND DISCUSSION

The demographics response frequency and the associated percentages indicate that faculty members

TABLE 1. CRONBACH'S ALPHA RELIABILITY TEST

Cronbach's Alpha Reliability Test Results					
No.	Factors	No. of Constructs	Preliminary Survey	Main Survey	Remarks
1.	Compensation	06	0.80	0.82	Reliable
2.	Research & Technology	11	0.75	0.84	
3.	Management Style	07	0.70	0.82	
4.	Recognition	06	0.74	0.84	
5.	Working Environment	07	0.74	0.83	
6.	In-Service Training	06	0.73	0.85	
Total		43	-	-	-

TABLE 2. COLLINEARITY TEST

Factors	Tolerance	VIF
Compensation	0.43	2.29
Research and Technology	0.60	1.65
Management Style	0.48	2.06
Recognition	0.55	1.81
Working Environment	0.46	2.13
In-Service Training	0.54	1.85

TABLE 3. DATA NORMALITY TEST

Factors	$\sigma^2$	N	Skewness	Kurtosis	Remarks
Compensation	0.66	204	0.87	0.72	Normal
Research & Technology	0.88	204	0.25	1.92	
Management Style	0.64	204	1.00	2.67	
Recognition	0.44	204	0.88	1.38	
Working Environment	0.59	204	0.42	2.69	
In-Service Training	0.76	204	1.00	0.89	

having the job title “Lecturer” actively participated as compare to others. Similarly male faculty members are more satisfied than female faculty members. However, the faculty members having age group 30-40years were responsible respondents. While graduates have also actively participated in the research. In the same manner

married faculty members’ response was higher than unmarried and the faculty members who have the job responsibility in teaching were more obliging and know the importance of the research with the high interests. The details of the respondents have been incorporated in **Table 4**.

**TABLE 4. PROFILE OF RESPONDENTS**

Measure	Frequency	Percent (%)
Job Title		
Lecturer	81	39
Assistant Professor	50	25
Associate Professor	38	19
Professor	35	17
Gender		
Male	163	80
Female	41	20
Age		
Less than 30 years	62	30
30 - Less than 40 years	63	31
40 - Less than 50 years	57	28
50 or More years	22	11
Education Level		
Bachelor Degree	121	59
Master Degree	60	30
Doctorate Degree	23	11
Others	00	00
Marital Status		
Single	100	49
Married	104	51
Experience		
1-5 years	63	31
6-10 years	43	21
11-20 years	30	15
21-30 years	35	17
More than 30 years	33	16
Job Responsibilities		
Teaching	91	44
Teaching and Research	70	34
Academic	30	15
Administration	13	07
Universities		
MUET, Jamshoro	85	42
NED, Karachi	57	28
DUET, Karachi	25	11
QUEST, Nawabshah	37	19

### 5.1 Factors of Job Satisfaction

The key factors (i.e. Satisfiers) and their relationship with job satisfaction should be significant with the mean value of each factor must be greater than or equal to 3 (i.e.  $\bar{X} \geq 3$ ). The hypothesis H1: The key factors are identified from the reliable sources and have influence of the Job satisfaction. This is acceptable only if the mean value of each satisfier should be more or equal to 3 and respective standard deviations satisfy the condition i.e.  $\sigma > 0.05$ . However, if the mean value is less than three and the respective standard deviation is less than 0.05, then the given hypothesis will be rejected. It has been observed from **Table 5** that each satisfier i.e. Compensation, Research and Technology, Management style, Recognition, Working environment, In-Service teaching, training, have mean value greater than or equal to 3 and their respective standard deviations are greater than 0.05, hence the key factors are significant to that of job satisfaction of the faculty members so that hypothesis

related to first objective has been supported. The individual means and standard deviation of each factor is shown in Table 5. H-2: The key factor i.e. satisfiers have the influence on the demographics of faculty members up to significance level. The demographic characteristics of the faculty members assessed are supporting to this developed hypothesis.

### 5.2 Gender

T-test was carried out to test the hypothesis i.e. H2 on the basis of key factors and their impact on the job satisfaction of male and female faculty members. It is observed by looking on the mean values of male and female, that male faculty members are more satisfied than female faculty members and male faculty members are more attracted towards the job. All the results validated by t-test values at the 95% confidence level. Hence, results support to H2 and their detail is given in **Table 6**.

**TABLE 5. INFLUENCE OF KEY FACTORS (I.E. SATISFIERS) ON JOB SATISFACTION**

Factors(i.e. Satisfiers)	Summative Points	$\bar{X}$	$\sigma$	Validity
Compensation	746	3.66	0.82	$\bar{X} \geq 3$ $\sigma > 0.05$
Research & Technology	759	3.73	0.90	
Management Style	738	3.63	0.76	
Recognition	793	3.88	0.66	
Working Environment	782	3.84	0.77	
In-Service Training	739	3.62	0.87	

**TABLE 6. INFLUENCE OF FACTOR ON MALE AND FEMALE JOB SATISFACTION**

Factors	Summative Points	$\bar{X}$ Female	Summative Points	$\bar{X}$ Male	T-Test	Significant at 95%
Compensation	164	3.99	586	3.59	4.93	0.127
Research & Technology	168	4.10	594	3.64	3.78	0.165
Management Style	167	4.06	576	3.55	3.68	0.169
Recognition	165	4.02	631	3.87	3.00	0.021
Working Environment	168	4.10	618	3.79	8.52	0.074
In-Service Training	164	3.99	579	3.55	4.14	0.151

### 5.3 Age Group

The impact of Job satisfaction of the faculty members according to their age groups has been assessed on the basis of mean values and their respective standard deviations. The results are shown in **Table 7**. The faculty members having the age group 40-50 are more satisfied due to having less value of standard deviation. It can be summarized that those faculty members have high experience and higher age limit are fully facilitated and it is not easy for them to move and again try for better position.

### 5.4 Marital Status

The level of Job satisfaction of the faculty members according to their Marital Status has been assessed on the basis of mean values and their respective standard deviations. The results indicate that the faculty members who are married are more satisfied due to having less

value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of Marital Status is shown in **Table 8**.

### 5.5 Education Level

The level of Job satisfaction of the faculty members according to their Education level has been assessed on the basis of mean values and their respective standard deviations. The results indicate that the faculty members who have Master Level Education are more satisfied due to having less value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of Education level is shown in **Table 9**.

### 5.6 Experience

The level of Job satisfaction of the faculty members according to their experience has been assessed on the basis of mean values and their respective standard

**TABLE 7. AGE GROUP AND JOB SATISFACTION**

Age Group	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
Less than 30	229	3.70	0.12	Mean<5.52	$\sigma > 0.06$
30-40 years	230	3.65	0.13		
40-50 years	213	3.74	0.09		
More than 50 years	86	3.93	0.40		

**TABLE 8. MARITALSTATUS AND JOB SATISFACTION**

Marital Status	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
Married	392	3.68	0.12	Mean<3.98	$\sigma > 0.10$
Single	367	3.77	0.14		

**TABLE 9. EDUCATION LEVEL**

Education Level	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
Bachelor	443	3.67	0.11	Mean<4.25	$\sigma > 0.18$
Master	225	3.77	0.09		
Doctorate	91	3.94	0.39		

deviations. The results indicate that the faculty members who have experience 11-20 years are more satisfied due to having less value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of experience is shown in **Table 10**.

### 5.7 Job Title

The level of Job satisfaction of the faculty members according to their present Job title has been assessed on the basis of mean values and their respective standard deviations. The results indicate that the faculty members who are in the Associate Professor rank are more satisfied due to having less value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of Job title is shown in **Table 11**.

### 5.8 Universities

The level of Job satisfaction of the faculty members according to employers has been assessed on the basis of mean values and their respective standard deviations. The results indicate that the faculty members who are working in the DUET Karachi are more satisfied due to having less value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of employers is shown in **Table 12**.

### 5.9 Job Responsibilities

The level of Job satisfaction of the faculty members according to assigned job responsibilities has been assessed on the basis of mean values and their respective standard deviations. The results indicate that the faculty

**TABLE 10. EXPERIENCE AND JOB SATISFACTION**

Experience (years)	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
0-5	233	3.71	0.13	Mean<5.02	$\sigma > 0.005$
6-10	151	3.52	0.73		
11-20	121	4.04	0.06		
21-30	121	3.46	0.08		
31 and above	132	4.02	0.32		

**TABLE 11. PRESENT JOB TITLE AND JOB SATISFACTION**

Job Title	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
Lecturer	304	3.76	0.11	Mean<4.04	$\sigma > 0.001$
Assistant Professor	181	3.62	0.14		
Associate Professor	134	3.51	0.09		
Professor	140	4.03	0.31		

**TABLE 12. PUBLIC SECTOR ENGINEERING UNIVERSITIES AND JOB SATISFACTION**

Name of University	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
MUET, Jamshoro	320	3.77	0.11	$\bar{X} < 4.04$	$\sigma > 0.001$
NED, Karachi	210	3.67	0.13		
DUET, Karachi	81	3.22	0.09		
QUEST, Nawabshah	149	4.04	0.30		

members who are working in involved in the Academic and Research are more satisfied due to having less value of standard deviation. The detail of results about job satisfaction of faculty members in the perspective of their Job responsibilities is shown in **Table 13**.

### 5.10 Factors of Job Satisfaction

The impact of key factors i.e. satisfiers has been assessed on level of Job satisfaction of the faculty members has been assessed on the basis of t-test values by applying the 2-tailed test. The results indicate that the faculty members desire the “recognition” on the top priority level. The detail of results about job satisfaction of faculty members in the perspective of their key factors i.e. satisfiers is shown in **Table 14**.

### 5.11 Inter-Construct Correlation

The inter-construct correlation test of key factors was conducted to observe the relationship between them. The results indicates the correlation among the key factors are greater than that of Pearson’s correlation i.e. 0.5. Hence all the key factors are strongly correlated. The detail of inter-construct correlation among the key factors is given in **Table 15**.

### 5.12 Ranking of Factors

The ranking of the factors of job satisfaction of faculty members help authorities to understand their motives, needs and drives so that the turnover of highly qualified, competent and productive faculty members to other

**TABLE 13. ASSIGNED JOB RESPONSIBILITIES AND JOB SATISFACTION**

Job Responsibilities	Summative Points	$\bar{X}$	$\sigma$	F-Ratio ( $\bar{X} \leq$ F-Ratio)	F-Probability ( $\sigma >$ F-Probability)
Teaching	338	3.72	0.12	Mean<4.04	$\sigma > 0.003$
Research & Technology	252	3.60	0.07		
Academic	118	3.93	0.10		
Administration	51	3.90	0.61		

**TABLE 14. KEY FACTORS I.E. SATISFIERS AND JOB SATISFACTION**

Key Factors ( i.e. Satisfiers)	t-values	df	Significant (2-tailed)	Mean Difference		Significant at95%
Compensation	11.46	203	0.000	0.65	0.54	0.76
Research& Technology	10.94	203	0.000	0.72	0.58	0.84

**TABLE 15. STRENGTH AMONG THE KEY FACTORS OF JOB SATISFACTION**

Factors	1	2	3	4	5	6
Compensation	1.00					
Research& Technology	0.63	1.00				
Management Style	0.65	0.58	1.00			
Recognition	0.56	0.46	0.64	1.00		
Working Environment	0.65	0.45	0.59	0.59	1.00	
In-Service Training	0.48	0.48	0.61	0.47	0.53	1.00

universities should be minimized because those faculty members are the asset of the institution as well as for the country. The past research shows that the factors having the greatest t-test value and the error in their respective standardized and un-standardized coefficient is less than that of the standard error. It shows the higher ranking by conducting the regression test by keeping one of the key factor of the job satisfaction of faculty members as the dependent and others should be the independent key factor.

### 5.13 Level of Job Satisfaction

The existing level of the Job satisfaction has been assessed on the basis of highest t-values and their associated regression coefficient of significant path. i.e. un-standardized coefficient and standardized coefficients having the error less than the standard error. The key

factors of the job satisfaction such as working environment ( $\beta_{us} = 0.68, \beta_s = 0.65, t = 12.04$ ), compensation ( $\beta_{us} = 0.61, \beta_s = 0.64, t = 12.03$ ).

In service training ( $\beta_{us} = 0.56, \beta_s = 0.61, t = 11.14$ ), management style ( $\beta_{us} = 0.67, \beta_s = 0.61, t = 11.15$ ), research and technology ( $\beta_{us} = 0.33, \beta_s = 0.38, t = 7.22$ ) and recognition ( $\beta_{us} = 0.39, \beta_s = 0.34, t = 5.62$ ) have the significant impact on the level of job satisfaction due to errors occurred in the regression coefficient are below that of the standard errors.

Thus Hypothesis H3: The indicators of job satisfaction which show the level of job satisfaction should be the significant has been supported by the results. The framework which shows the existing level of the job satisfaction is shown in **Fig.1**.

TABLE 16. RANKING OF FACTORS

Key Factors	$\beta_{us}$	$\beta_s$	t-Test Value	Standard Error	Ranking
WorkingEnvironment	0.68	0.65	12.04	0.57	I
Compensation	0.61	0.64	12.03	0.05	II
In-Service Training	0.56	0.61	11.15	0.05	III
Management Style	0.67	0.61	11.15	0.06	IV
Research & Technology	0.33	0.38	7.22	0.46	V
Recognition	0.39	0.34	5.62	0.07	VI

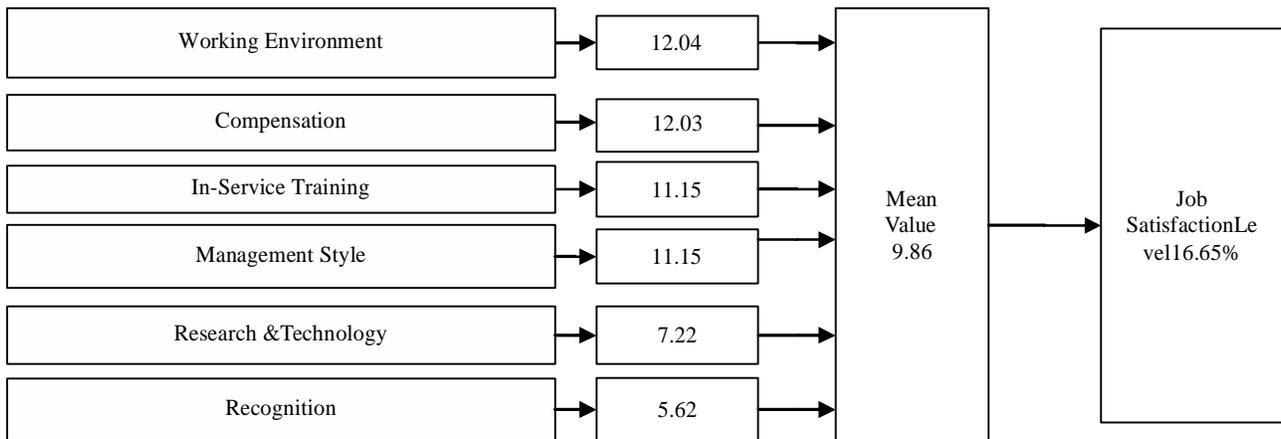


FIG. 1. FINAL RESULTS REGARDING JOB SATISFACTION LEVEL OF FACULTY MEMBERS

## **6. FINDINGS AND RECOMMENDATIONS**

The Public Sector Engineering Universities should improve the level of job satisfaction by exploring the causes of lower job satisfaction through the conducting of “Organizational Climate” survey which is the survey of shared history, expectations, unwritten rules and social morals that should effect on the behavior of faculty members within the universities. The research emphasize that demographics of the faculty members have significant influence on the level of job satisfaction. Hence authorities should consider the demographics of the faculty members while formulating polices concerned to that of faculty members. The faculty members should be considered the asset of universities and the authorities should focus towards lowering the turnover of the faculty members. The research also emphasizes to the authorities for the periodic assessment of the level of job satisfaction of the faculty members for their effective contribution towards the effective achievement of the goal of academia.

The research findings shows that university authorities should also ensure that highly qualified, competent and productive faculty members should also play the more active role to improve the quality, efficiency , productivity so that universities should compete throughout the world in top rankings.

It should not be claimed herein the research that efforts made in throughout research would be end, but that are again the precedence for further innovative research work on the level of job satisfaction of the faculty members in public sector engineering universities. Further research is needed to investigate other potential antecedents of jobsatisfactionsuch as Promotions, fringe benefits, autonomy, research support, Intrinsic and extrinsic rewards, internal and external equity etc.

As this study is limited to the province of Sindh, the research area for the study may also be expendable about the national level inthe perspective of the factors which have influence on the job satisfaction of the faculty members in engineering universities.

The comparative study of the job satisfaction of the faculty and non-faculty members of engineering universities may also be feasible in the wider scope and the research area.

## **7. CONCLUSIONS**

An attempt has been made in this study to assess the level of Job satisfaction of faculty members who are working in the public sector engineering universities situated in the Province of Sindh. All the results are reasonably supporting to the hypothesis to be formulated in the perspective of the aims and objectives of the research.

The research instrument was used for collecting the data is five point likertsscaleand the analysis has been carried out by using various types of statistical techniques such as regression analysis, correlation analysis and ANOVA Test. The analysis which has been carried out during the research is three fold.

Firstly, the key factors i.e. satisfiers having the great impact on the job satisfaction of the faculty members in engineering universities have been identified such as Compensation, Research and technology, Management style, Recognition, Working environment and In-service training also verified from their sources and validated.

Secondly, the demographics of faculty members have influence on the job satisfaction are assessed and validated with the help of mean, standard deviation and validated by using F-ratios and F-probabilities respectively.

In the last, the identified factors which have influence on the job satisfaction of the faculty members are prioritized by using the regression coefficients to investigate the level of job satisfaction and the frame work has been proposed to assess the time to time level of job satisfaction of the faculty members in the public sector engineering universities.

## 8. SUGGESTIONS

The findings suggest that the faculty members of the universities have a lower level of job Satisfaction. These findings have practical implications for the improvement in the level of job satisfaction. The lower level of job satisfaction of the Faculty members indicate that authorities should improve the motivational strategies to retain the highly qualified, productive and competent faculty members for the longer period of time to contribute in the socio-economic development of the society by paying their attention towards the recognition, research and technology and management style which have low significance on the job satisfaction. Simultaneously, the authorities need to probe into the causes of low satisfaction to avoid the attrition of the productive faculty members to other countries which is not only the loss of the institutions but also for the country. This should have the prime importance because research findings have consistently found that job satisfaction has significant impact on employee commitment towards the effective accomplishment of the organizational goals effectively and efficiently. Similarly, faculty members are main stakeholders of the institutions and their higher job satisfaction would lead to lower turnover and absenteeism. Accordingly universities will contribute in the society to produce quality professionals and researchers, which play the major role in the advancement of the technologies, smooth running of the sophisticated systems and lead the organizations in this era of competition. This research provides the guideline to university authority about the sequential procedure of measuring the time to time improvement in the level of faculty members' job satisfaction through identifying factors that causes the lower levels of job satisfaction. This research has also extended the framework to an elevation of the level of job satisfaction of the faculty members through incorporating the factors which have great influence in the climate of the engineering universities.

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