INVESTIGATING JOB SATISFACTION LEVEL OF FACULTY MEMBERS IN PUBLIC SECTOR ENGINEERING UNIVERSITIES OF SINDH, PAKISTAN

Ameer Ali Shahani[*]

Anwaruddin Tanwari*

Hussain Bux Marri*

ABSTRACT

This study attempts to analyze the level of job satisfaction among the faculty members on the basis of identifying key factors such as compensation, research and technology, management style,recognition,working environment, in-service teaching training and compares the level of job satisfaction of male and female faculty members in public sector engineering universities of Sindh-Pakistan. After reviewing literature authors have segregate the factors and designed questionnaire. Preliminary survey was conducted in this survey; respondents were asked about the validation of the questionnaire and receivedfeedback regarding improvement and redesign of the questionnaire. After that questionnaire was floated for conducting the main survey. The four universities were selected and 375 sample sizes targeted in this research. The data was analyzed using SPSS version 12.0.It is concluded that all the factors were significant and have a positive influence on level of job satisfaction. However, female faculty members were more comfortable in their job as compared to male. This research is beneficial for faculty members of the universitiesand even for management and decision makers.

Keywords: Job satisfaction; Faculty members; Public sector engineering universities; Empirical data analysis; Sindh; Pakistan.

[*] **Department of Industrial Engineering and Management, Mehran University of Engineering and Technology, Jamshoro -76062- Sindh, Pakistan**

1. INTRODUCTION

To investigate the reasons of job contentment or discontent is a continuing area of keen interestfor researchers. Many researchers have investigated satisfaction and dissatisfaction levels of the faculty members among them Luthans [1].He also pointed out that satisfied faculty members are productive and they are more attracted towards their job than dissatisfied as they are less productive and more incline to quit. They do not cooperate for the fulfillment of the goals of the organization.

Faculty members' satisfaction regarding job is not only impact on the performance of the organization, but it also influence on the human health and mental wellbeing [2-3].Spector [4] mentioned that the positive attitude increase performance and wellbeing among faculty members, whereas a negative attitude don't create well satisfactory thoughts among the faculty members and because of that performance of organization is affected .Organization performance can be affected by factors such as absenteeism, turnover or retention of employees [5]. The importance of job satisfaction of faculty members can only be determined by getting the relevant data in perspectives of factors affecting on job satisfaction. The good influence of factors attracts the faculty members to perform the assigned job effectively and efficiently [6].In addition Job satisfaction regarding faculty members is affected by several personal and situational factors such as compensation, management style, recognition and comfortable environment at work places which have directly impact on performance of employees towards the job to be paid [7]. In order to increase performance and interest in work it is essential to understand the factors influencing the job satisfaction and consider faculty members as a real asset of the organization. Moreover, most of research studies regarding job satisfaction are conducted before 1981.According to the report of [8]most of the research studies about job satisfaction of faculty members were conducted in UK and USA since 1996, However, gradually impact of the studies increased in Malaysia and other developed countries [9].But now need have been felt inPakistan. Some studies have been completed regarding job satisfaction of faculty members in private universities and very few studies were conducted in public sector universities. Ghazi et al.,[10] mentioned that private universities are contributing more actively in the society by producing highly qualified professionals who are playing vital role in the economic development. They have more recognition at the employers.The reason is that their faculty members are more

satisfied from their paid jobs and playing their role more actively as comparedto public sector universities. Nowadays; public sector universities are also playing a major role in the well-being of the country. So it is important that study must be carried out in that area in order to improve quality ofEducation and satisfaction among faculty members as they may contribute to the educational growth of the country. Analyzing the level of Job satisfaction of faculty members is more complex due to having differences in gender, age, marital status, level of education, experience, designation, job responsibilities and the differences in internal equity and external equity [10]. In existing literature, it has been found that female faculties were more satisfied than male employees and they have less expectation [8]. Similarly, limited research was available about the male and female characteristics [2.8.11].Although individual characteristics impacts have much more on the well-being of faculty members. Most of the research studies were conducted in developed countries. While there is need of studies on job satisfaction of faculty members in developing countries like Pakistan. In order to overcome this gap study were carried out in public sector engineering universities in the context of Sindh-Pakistan. The purpose of this study was to analyze the level of job satisfaction of faculty members and compare the job satisfaction level among male and female faculty members.

2.   SCOPE OF THE RESEARCH

This research focuses on the following areas

1.   This research will help to minimize faculty turnover through identifying the factors which influencing the job satisfaction of faculty members

2.   This research will also provide guidelines for the management to improve the life style of faculty members by rectifying the areas of dissatisfaction

3.   This research will also cover the deficiencies of literature regarding job satisfaction of faculty members in Public Sector Engineering Universities of Sindh.

4.   This research will help the organizations to make managerial decisions within companies.

3.   RESEARCH METHODOLOGY

The Quantitative method has been used in this study. The selected universities in this research survey were the engineering universities of Sindh, namely Mehran University of Engineering and Technology (MUET) Jamshoro, Nadir Shaw Eduljee Din Shaw(NED) Karachi, Dawood

University of Engineering and Technology (DUET) Karachi and Quaid-e-Awam University of Engineering, Science and Technology (QUEST) Nawabshah. The targeted population was all faculty members of the respective universities, including Lecturers, Assistant professors, Associate professors And Professors. The questionnaire was designed and it contains two sections. Section A which contains demographic information having 08 factors and section B was further divided into sixfactors and their sub-factors. This section was designed to obtain the respondents'perceptions with respect to their work roles. Focus in the questionnaire was related to the respondents' perception towards their universities. Preliminary survey was conducted in order to ask the questions and getting suggestions from the researchers with respective of factors and related factors as the questionnaire may be filtered and redesigned. After that main survey was conducted and questionnaires were getting filled from respondents' regarding job satisfaction of faculty members. A five-point Likert scale was used such as One representing strongly disagree, two fordisagreeing, three for uncertain, four for agreeing, five for strongly agree.

4.   DATA ANALYSIS

The data collected is analyzed by Statistical Packages for Social Science (SPSS) Version 12.0, for both the descriptive and inferential statistics. 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 January 2015.The 375 sample sizes of questionnaires were distributed among faculty members of four public sector engineeringuniversities of Sindh. Among the 375 questionnaires distributed, 221 questionnaires were returned back. Among them 204 questionnaires were filled correctly and others were either incomplete or the employees given multiple answers. The questionnaire was designed to collect information on six factors of satisfaction such as compensation, research and technology, management style,recognition,working environment, in-service teaching training. Obtained data were summed and averaged because there were various sub factors in the questionnaire. In the case of negative response scores may be in reversing the order.

4.1.   RELIABILITY OF DATA

The data was verified by conducting the Cronbach alpha. In this test reliability of factors were checked and verified with given data point of 0.6 as suggested by [12]. Although the findings of preliminary survey and main survey results were above the given data point. In table 1, it is estimated that all of the factors were reliable and they have a maximum range than the given data limit.

Table 1: Reliability of Data

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

4.2.   VALIDITY OF DATA

The validity mostly called the constructs validity because validity represents the adequacy of the data for which it is collected. The data to be received from the respondents may not be the fully accurate because most of the respondents do not understand the technical questions rightly. Similarly, some of the respondents may be biased. However, in table 2, the validation of data

have been shown and it is suggested that the tolerance for the Constructs should be greater than 0.1and the respective variance inflation factor (VIF) should be less than 10 and the VIF values are the reciprocal to that of the Tolerance (Tatham, 1998). By conducting the tolerance test it isdetermined from the results that none of the factor has 0.1 or less than 0.01.So it is assumed that no anymulticollinearity exists in the data. In addition variance inflation factor (VIF) test was conducted in order to check the collinearity problem, it has been suggested that if the value of factors wereexceeding 10 then there is a serious problem foranalysis. But from the results, it has been found that all the value of factors is less than 10 and there is no any serious collinearity among the factors that exists.

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 teaching training	0.54	1.85

5.   RESULTS AND DISCUSSION

The profile of respondent's in table 3 represents the facultymembers' response regarding job satisfaction questionnaire and data points received from respondents on different perspectives and these data points on individual factor and their sub factors were shown in percentage.The faculty members of each demographics have been actively participated during the cross sectional survey of gathering the information. The demographics response frequency and the associated percentages indicate that faculty members having the job title "Lecturer" have actively participated comparative to others.Similarly, male faculty members were realizing the ethical research responsibility as compare to that of female.However, the faculty members having age group 30-40 were responsible respondents, while graduates have also actively participate in the research, whereas, married faculty members response was greater than unmarried and the faculty

members who have the job responsibility in teaching were the more obliging and know the importance of the research with the high interests.

Table: 3 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:		
0-5 years	63	31
6-10 years	43	21
11-20 years	30	15
21-30 years	35	17

31-above years	33	16
Job Responsibilities:		
Teaching	91	44
Teaching and Research	70	34
Academic	30	15
Administration	13	07

5.1   MULTICOLLINEARITY AND NORMALITY OF DATA

Large sample size 375 respondents were targeted for this research study. For this sample size central limit theorem was applied because of that no normality of data was needed. Linearity assumptions were critically examined in order to ascertain the use of correlation and regression. Multicollinearity showed the normality of the data. The correlation coefficient is a technique which helps in determining the relationship among the factors. In order to examine the relationship among the factors Pearson's correlation was used and it provides the data limit of factors that should not be exceeded 0.85. From the table: 04. It has been assumed that all factors have less data point value than given limit so it can be assumed that factors are strongly bonded in relationship and such associations among the factors showed that there was positive relationship and factors were in the expected range. The relationship among the factors shows that there is no any multicollinearity problem exists among the factors.

Table:4CorrelationsofFactors

Factors	Estimate	Standard Error	P-value
Compensation	0.22884	0.05721	*0.01792
Research & Technology	0.25316	0.05338	*0.01817
Management Style	0.21316	0.05329	*0.01783
Recognition	0.18672	0.04668	*0.01905
Working environment	0.21584	0.05396	*0.0188
In-Service training	0.24472	0.06118	*0.01776

Gender	0.22374	0.05428	*0.01826

5.2   REGRESSION RESULTS

After conducting the multicollinearity and normality of individual factor on job satisfaction another ordinary least square test was carried out in order to find the relationship of dependent and independent factors such as demographics and other work related factors. The results of multivariate regression analysis showed that compensation, research and technology, management style, recognition, working environment and in-service teacher training are significant aspects of job satisfaction. However, demographic factor such as gender is also significant characteristic. Regression results in table 5 shows that all the factor and demographic characteristic such as gender were positive in a relationship and they were highly significant at 0.05 significant levels because all factors are less than 0.05 significant levels.

Table 5: Regression on job satisfaction of Public Sector Engineering Universities in Sindh-Pakistan

FACTORS	ESTIMATE	STANDARD ERROR	P-VALUE
Compensation	0.22884	0.05721	*0.01792
Research & Technology	0.25316	0.05338	*0.01817
Management Style	0.21316	0.05329	*0.01783
Recognition	0.18672	0.04668	*0.01905
Working environment	0.21584	0.05396	*0.0188
In-Service training	0.24472	0.06118	*0.01776
Gender	0.22374	0.05428	*0.01826

Survey conducted in January 2015 in Public SectorEngineering Universities ofSindh-Pakistan.(*) p<.05.

Therefore, Mean rank and standard deviation among male and female were calculated in order to determine the comparison among the male and female faculty members.

The result shows that female faculty members are more satisfied than the male faculty members as results are depicted in the table 6.Comparative ranking of factors and sub factors were based on average score of each group.

Table 6: Job satisfaction level among Male and Female faculty members

S.NO.	FACTORS	RANKED	
		Male	Female
1	Average M (SD)	3.67(0.092)	3.86(0.056)
	Compensation	4th	6th
2	Research and Technology	3rd	3rd
3	Management Style	5th	2nd
4	Recognition	1st	4th
5	Working environment	2nd	1st
6	In-Service teaching training	6th	5th

6.   CONCLUSION

An attempt has been made in this study to investigate job satisfaction level of faculty members in Public Sector Engineering Universities of Sindh, Pakistan

According to the first objective of the research to determine the level of job satisfaction on basis of identifying key factors. Cronbach's Alpha test wasconducted in order to check the factors, reliability and, then Tolerance and VIF tests were conducted in order to see the validity of dataand data is within the range or out of range and posinga problem for analysis as suggested by researchers,but it was found that data covers only small distance and they were within limitsand there is no any collinearity exist among the factors of job satisfaction.

After determining the validity of data Multicollinearity and normality of tests were calculated in order to see that data were normally distributed and there is no anymulticollinearity problem exists among the factors. Pearson's correlation of factors was calculated and it was suggested that the relationship among the factors did not exceed 0.85.From the results it was found that factors were significant and they are highly correlated with each other. All the factors have a positive impact and highly association with each other. The significance of the factors was

determined and it was found that all the factors and related factors have a positive influence and they were significant in this way the first objective of the study was achieved. In last Mean and Standard deviation of male and female factors were calculated. The mean and standard deviation of factors was shown in mean rank of factors in order to find the influence of gender with the factors of job satisfaction. Results showed that female faculty members are more satisfied than the male counterparts and in this way comparison among the gender were determined and second research objective were accomplished.This study is limited, and it covers only public sector engineering universities of Sindh –Pakistan due to speciation and data sample it was difficult to enlarge the study at Pakistan level.

REFERENCES

[1]   Luthans, F.(2004) *OrganizationalBehavior*. New York: McGraw-Hill.

[2]   Oshagbemi, T.(1999)Job satisfaction of UK academics, Educational Management and Administration.24, 889-400.

[3]   Sarker,A.H.,A.(2003)Crossmann and P.Chinmeteepituck.:The relationships of age and length of service with job satisfaction:Anexamination of hotel employees in Thailand.*J.Managerial Psychol*18, 745-58.

[4]   Spector, P.E.(1997) Job Satisfaction: Applications, Assessment, Causes and Consequences. London: Sage Publication.

[5]   MerrelynEmery. (2010)When the Cure is the Cause: the Turnover and Absenteeism Problems. *The Innovation Journal*: *The Public Sector Innovation Journal*15**,** article 6.

[6]   Nguni, S., Sleegers, P., &Denessen, E.(2006)Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. School Effectiveness and School Improvement17**,** 145-177.

[7]   Hagedorn, L.S.(2000)Conceptualizing faculty job satisfaction: Components, theories, and outcomes.*New Directions for Institutional Research*45, 5-20.

[8]   Oshakbemi T.(1997)Job satisfaction profiles of university teachers.*J.Managerial Psychol*12, 27-39.

[9]   Syed, A.A.S.G., Bhatti, N., Michael.S, Shaikh, F.M., & Shah, H.(2012)Job satisfaction of faculty members of university in Pakistan: case study of university of Sindh –Jamshoro.*Modern Applied Science*6, 89-95.

[10]   Ghazi, S.R., Ali, R.Shahzada, G., &Israr, M. (2010)University teachers' job satisfaction in the North WestFrontier province of Pakistan.*Asian Social Science*6, 188-192.

[11]   Oshagbemi,T.(2000)Is the length of service related to the level of job satisfaction?*Intl.J.SocialEconomic 27,213*-26.

[12]   Robert v. krejcie, daryle w. Morgan. (1970)Determining sample size for research activities. *Educational and psychological measurement*30,607-610.