Correlation between Teachers' Self-Efficacy Perceptions and Job Satisfaction Level (A Case Study of the University of Agriculture Peshawar, Pakistan)

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Abstract

Teaching efficacy or effectiveness is a major goal of education. It is recognized that teaching efficacy has a far-fetched effect on the overall educational programme. We in Pakistan are divided into different types of educational systems i.e. Government run, and Private. The teaching standard is different and their evaluation criterion is also not the same. *More importantly the curriculum and examination system are not alike.* Due to these reasons efficacy need to be evaluated and its relationship with the job satisfaction. A teacher can be effective if he/she gets out of the job what he wants to get. There is a close relation between their job (teaching) satisfaction and efficacy of teaching. This research study examines the correlation between job satisfaction and efficacy of university teachers. Categorized on the basis of nature of the job, contract base teachers of Institute of Business and Management Sciences (IBMS) at The University of Agriculture were grouped as sample 1, and the faculty members of Faculty of Rural Social Sciences (FRSS) working on permanent basis were grouped as sample 2. Respondents 30, 30 from each group were selected using Stratified Random Sampling method. The results showed a positive correlation between the two variables (job satisfaction and efficacy) for both the samples. But for sample 1 ($r_1 \approx .45$) it was comparatively stronger than sample 2 ($r_2 = .1300$) which shows that the job related variables of employees working on contract basis do effect their satisfaction.

Keywords: Job satisfaction, Efficacy, Contract employees, Permanent employees, FRSS, Likert Scales, Rank correlation.

Introduction

The most difficult problem in educational research is that of recognizing teacher's efficacy of discriminating between more and less effective teachers. It is therefore, quite accurate to say that an institution's efficacy

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depends directly on the efficacy of its teachers, yet its relationship with Job Satisfaction need to be established in the particular environment of educational institution.

Job satisfaction is a very important attribute which is frequently measured by organizations. The most common way of measurement is the use of rating scales where employees report their reactions to their jobs. Questions relate to rate of pay, work responsibilities, variety of tasks, promotional opportunities the work itself and co-workers. Some questioners ask yes or no questions while others ask to rate satisfaction on 1-5 scale (where 1 represents 'not at all satisfied' and 5 represents 'extremely satisfied' (Luthons, 2005).

Maslow (1970) a reputed educationist indicates that an individual's satisfaction is determined by the fulfillment of the five levels of needs. These are Physiological needs, Safety needs, Social needs, self esteem needs and Self actualization. He adds that there are two variables, which determine satisfaction. These are External factors i.e. salary and interpersonal relations and Internal factors i.e. achievement and recognition.

Riddle (1981) renowned and famous researcher also conducted many studies in this regard. He concluded that only and only a well mentally satisfied primary school teacher could teach to the small kinds in a befitting way. He is of the view that teaching to the small children is a laborious task, and can be assigned to only those people who are mentally contented.

There are some important factors which heavily contribute to Job Satisfaction. Promotion and salary are some of them. Musazi (1982) conducted a survey which indicated that promotion is a gate way to job satisfaction. He says that promotion does not only mean increase in monthly payment rather it means increase in responsibilities too. In order to make the teachers satisfied, promote and increase their monthly salary, enhance their responsibilities so that they may be able to mark.

Some researchers are of the view that teachers should be considered in administrative decision to feel them an important part of organization as well as responsible for the decisions they were a part. Patti (1983) says that teacher's participation in decision-making is associated with his excellent performance. Teachers' performance and taking them into confidence by administrator are interrelated.

Iffaldano and Muchinsky (1985) studied the relationship between job satisfaction and job performance assessed by a meta – analysis indicated a weak (.17 best estimate correlation) between the two variables.

Ghonaim (1987) conducted a research, which focuses on correlation between the organizational climate and job satisfaction of teachers. He has opined that satisfied teachers actually help in creating a good and conducive educational environment, which is an essential element for the smooth running of any academic institution.

Research studies indicate a weak degree of correlation between Job Satisfaction and Performance. Timothy, et al (1998) did a more sophisticated meta – analysis on 312 samples with a combined N of 54, 417 and found the mean true correlation between job satisfaction and performance to be .30.

Bradley and Roberts (2004) studied that self-employed workers satisfaction with their jobs compared to wage and salary workers. Using The National Survey of Families and Households: Wave I, 1987–1988, and Wave II 1992–1994 several expectations were evaluated. First, self-employed persons should enjoy higher job satisfaction than others. Second, a portion of the association between job satisfaction and self-employment should be explained by higher levels of self-efficacy and by lower levels of depression among the self-employed compared to others. Third, self-employment veterans are a select group and should be different systematically from self-employment newcomers with respect to reported job satisfaction. Findings offer support for the first and second arguments above but not the third. Post-hoc analysis suggests that among the newly self-employed, the association between job satisfaction and self-employment depends on both the quantity and quality of time invested in the business.

Hypothesis

- Null Hypothesis: H_o: There is no relationship between Job Satisfaction and Efficacy.
- Alternative Hypothesis: H₁: There is a strong relationship between Job Satisfaction and Efficacy.

Research Methodology

The major purpose of the study was to find out the relationship between the Job Satisfaction and efficacy of the University Teachers. All teachers working in The University of Agriculture Peshawar constituted the population for this research study. While Institute of Business and Management / Computer Sciences and Faculty of Rural Social Sciences are the two sub-samples taken from it. In the present research case a stratified random sample each from both the sub-populations were used in which stratification was applied to have a representative samples from the respective disciplines in sub samples. For example in IBMS, teachers from Computer Sciences, Information Technology and Business Administration were segregated into three strata and then ten from each were included in sample1. The same procedure was applied to Agriculture Economics, Applied Economics and Rural Sociology of FRSS. The University of Agriculture was taken purposively to have a comparative study of permanent faculty employed in Department of Agriculture Economics and Institute of Development Studies (IDS) with the contract base faculty of Institute of Business and Management Sciences/ Computer Sciences while samples were selected through Stratified random sampling method from them.

The main hypothesis of the study was "There is no relationship between Job Satisfaction and Efficacy. Two instruments were used and utilized for collecting and gathering data they were Questionnaire and Observation Check list.

Sometimes, the actual measurement or counts of individual or objects are either not available, or accurate assessment is not possible, they are then arranged in order according to some characteristics of interest. Such an order given to an individual or object is called its ranks. The correlation between such sets of ranking is known as Rank correlation. Here; in this case tied observations were found, the formula for tied observations was used instead. i.e,

$$\mathbf{r} = \frac{\sum x_i y_{i-} (\sum x_i) (\sum y_i) / n}{\sqrt{[\sum x_i^2 - (\sum x_i^2)/n][(\sum y_i^2 - (\sum y_i^2)/n]}}$$

Where x_i and y_i are ranks given to two objects.

- $\Sigma\text{-}$ stands for summation/sum
- x- stands for Job Satisfaction

y- stands for efficacy of teaching

n- stands for number of observation

It is known as Spearman's coefficient of Rank Correlation.

Criteria for Measuring Job Satisfaction

An individual's sense of satisfaction with work and organization derived from at least four different considerations. Work itself is of the basic element in building an individual's sense of satisfaction. People must feel that they are using skills that they value and that they work requires them to acquire those skills to different situation. Thus they are challenged. At the same time, supervision received is important. People need to feel comfortable with the guidance, recognition, and equity in the evaluations they receive. Compensation, of course is important but it is important not only in terms of pay but also in terms of what it signals in status of promotion. Finally, people must feel a sense of influence or control regarding work or the results of their efforts.

Measuring Job Satisfaction

There are two methods of measuring job satisfaction. Single Score Method (Yes, No) and Summation Score Made Approach – a summation of job facets, identifies key elements in a job and asks for the employee's

feelings about each. Typical factors that would be included are the nature of the work, supervision, current pay, promotion opportunities and relations with co-workers. These factors are rated on standardizes scale and then added up to create an overall job satisfaction score. (Robins et al, 2006: p. 81) We have used a five points Lickert scale for measuring Job Satisfaction.

Criteria for Measuring Efficacy

Fred Luthons and his associates looked at the issue of what managers do from a different perspective. They compared successful managers vs. effective ones. Efficacy is defined in terms of quantity and quality of work done, satisfaction and commitment of the employees. (Robins et al, 2006. In the present research case similar variables are taken for measuring efficacy of the teachers, their task is delivering of a lecture, satisfaction and commitment of the students are other important variables. Lickert Scale was used for the measurement of Efficacy as well.

Results and Discussion

The correlation coefficient (i.e. r = 0.44) for rank correlation between job satisfaction and efficacy for sample1 is a considerable evidence that there is a considerable relation between the two variables i.e. we can say that for sample1, in case of the contract base faculty of IBMS, job satisfaction is correlated to efficacy. For sample2 although the correlation coefficient is a positive value, it is less compared to sample1. To state differently, there is a weak degree of correlation between job satisfaction and efficacy for sample2 compared to sample1. It is strongly backed by an individual faculty member, whose job satisfaction was 48 while he ranked the highest in efficacy (67).

No.	Job satisfaction(x)	efficacy(y)	X(ranks)	Y(ranks)	xy	x ²	y ²
1	53	52	9	13	117	81	169
2	64	54	27.5	15.5	426.25	756.25	240.25
3	57	55	16	17.5	280	256	306.25
4	52	31	7	1	7	49	1
5	58	58	19	24.5	465.5	361	600.25
6	68	61	29.5	29.5	870.25	870.25	870.25
7	51	54	6	15.5	93	36	240.25
8	57	48	16	7	112	256	49
9	49	47	3.5	5.5	19.25	12.25	30.25
10	53	59	9	26.5	238.5	81	702.25

Table 1: Correlation between Job Satisfaction and Job Efficacy for sample 1

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11	55	56	12.5	21	262.5	156.25	441
12	61	50	24	9.5	228	576	90.25
13	56	36	14	2	28	196	4
14	61	58	24	24.5	588	576	600.25
15	58	60	19	28	532	361	784
16	54	38	11	3	33	121	9
17	62	40	26	4	104	676	16
18	50	52	5	13	65	25	169
19	48	51	2	11	22	4	121
20	45	49	1	8	8	1	64
21	60	56	21.5	21	451.5	462.25	441
22	64	50	27.5	9.5	261.25	756.25	90.25
23	58	55	19	17.5	332.5	361	306.25
24	61	56	24	21	504	576	441
25	49	47	3.5	5.5	19.25	12.25	30.25
26	68	61	29.5	29.5	870.25	870.25	870.25
27	53	52	9	13	117	81	169
28	55	56	12.5	21	262.5	156.25	441
29	60	56	21.5	21	451.5	462.25	441
30	57	59	16	26.5	424	256	702.25
Total	1697	1557	465	465	8193	9444.5	9439.5

Source: Survey

$$\mathbf{r} = \sum \mathbf{x}_i \mathbf{y}_{i-1} \sum \mathbf{x}_{i} (\sum \mathbf{y}_{i}) / \mathbf{n}$$

$$\overline{\sqrt{[\sum x_i^2 - (\sum x_i^2)/n][(\sum y_i^2 - (\sum y_i^2)/n]}}$$

r = 985.5/2234.49 = 0.441038

Table 2: Correlation between Job Satisfaction and Job Efficacy for Sample 2

No	Job satisfaction(x)	efficacy(y)	X	Y	Ху	x ²	y ²
1	62	61	17.5	25.5	446.25	306.25	650.25
2	54	52	7	9	63	49	81
3	48	67	3	30	90	9	900
4	57	56	10	15	150	100	225
5	61	60	15.5	23.5	364.25	240.25	552.25
6	59	57	13	18.5	240.5	169	342.25
7	65	53	24	12	288	576	144
8	64	65	20	27.5	550	400	756.25
9	54	52	7	9	63	49	81

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10	57	56	10	15	150	100	225
11	50	45	4	4	16	16	16
12	66	40	28	1.5	42	784	2.25
13	40	45	1.5	4	6	2.25	16
14	67	57	30	18.5	555	900	342.25
15	53	51	5	7	35	25	49
16	65	56	24	15	360	576	225
17	59	57	13	18.5	240.5	169	342.25
18	66	59	28	22	616	784	484
19	65	48	24	6	144	576	36
20	62	61	17.5	25.5	446.25	306.25	650.25
21	54	52	7	9	63	49	81
22	57	58	10	21	210	100	441
23	64	65	20	27.5	550	400	756.25
24	61	60	15.5	23.5	364.25	240.25	552.25
25	65	53	24	12	288	576	144
26	66	40	28	1.5	42	784	2.25
27	59	57	13	18.5	240.5	169	342.25
28	65	53	24	12	288	576	144
29	40	45	1.5	4	6	2.25	16
30	64	66	20	29	580	400	841
Total	1769	1647	465	465	7497.5	9433.5	9440

Source: Survey

$$\mathbf{r} = \sum \mathbf{x}_i \, \mathbf{y}_{i-1} \sum \mathbf{x}_{i} \, (\sum \mathbf{y}_{i}) / \mathbf{n}$$

$$\sqrt{[\sum x_i^2 - (\sum x_i^2)/n][(\sum y_i^2 - (\sum y_i^2)/n]]}$$

r = 290/2229.248 = 0.13

Conclusions

The main purpose of this study was to find out the correlation between job satisfaction and efficacy for both the sample and test the differences in populations if any. The value of Pearson's rank correlation for sample is 0.44103 (Timothy and his colleagues found it be .30), showing that there is a positive correlation between the two variables; we can say a satisfied teacher is more effective. For sample 2, the value is .1300 (Iffaldano and Muchinsky, 1985) (.170 best-estimate correlation), again an evidence of a weak positive correlation. Although both the values are positive, but sample 1 shows a stronger correlation, or stated differently, the efficacy of sample 1 is affected more by the prevailing circumstances regarding their job than the permanent faculty members of the same

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faculty. There is a difference between the satisfactions of both the samples.

To conclude we can say that the employees working on contract basis at The University of Agriculture Peshawar are faced with a lot of problems regarding their jobs. They are paid with a very low amount of salary; they have no job security and other facilities available to their other fellows making them not satisfied. (These variables were also the determinants for job satisfaction in Anthony Scott and his fellows work in 2006). They may be less qualified, but they are not required to be highly qualified and high qualification in their area of studies; is not readily present in the whole of even in Pakistan. We have very few PhDs in Finance or Marketing. It is not a fault on their side if they are not highly qualified. If they were provided with the same facilities like their fellows in other departments, they may have acquired it as well. A clear example of it is the enrollment of the whole faculty in MS Programme.

Limitations of the Study

The study oriented around the job satisfaction and its relationship with the employee's efficacy. The study was undertaken in education sector only. And as an institution the study was limited to the faculty of Rural Social Sciences of the Agriculture University Peshawar. Although other spheres of the education may be narrated, but were not the focus under this study. The main reasons for limiting this study were the time and money constraints.

Recommendations

After analyzing the results and feedback from employees in the formal interview before disbursement of questionnaire, we found that the contract base faculty of IBMS is not happy with their monthly reward and job structure, which is affecting their job performance as well, a result found by Musazi (1982) in his work as well. So it is highly recommended that for the sake of achieving efficacy and for better performance, the employees should be given full job security and at least a better reward for their services. They felt as being discriminated by not having those facilities which are available to their fellows in other departments of the same university. Although they are not satisfied like their other fellows still they are equally effective. All the teachers should be treated alike and should be facilitated for future studies and capacity building programme. Taken as a whole, most of the employees in both the samples were found not satisfied with their present salary; therefore the salary structure may be revised for it contributes a lot to a person feeling of contentment.

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