

Teachers' Burnout in Polytechnics of State of Uttar Pradesh in India and its Analysis

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Abstract

Polytechnics in India are technical institutions offering courses and programmes in the field of engineering and technology at diploma and post diploma levels for producing technician engineers. These institutions play a key role in industrial restructuring on the technology dimension by training and retraining and continuous development of quality technician engineers required by the industry. This calls for a greater responsibility on the part of teachers who work in these institutions. Of particular concern is the impact of teachers stress and burnout on the teaching process itself especially in polytechnics with preponderance of disadvantaged students who can ill-afford deterioration in teachers' motivation and commitment. The state of Uttar Pradesh is the largest and most populous state in India. Being the biggest state has its own sets of problems with the polytechnic teachers reporting lack of enthusiasm coupled with stress and burnout affecting the teaching learning process. It was, thus, felt necessary to conduct a research study with an objective of investigating the level and the relationship of Burnout and Job satisfaction of polytechnics teachers in Uttar Pradesh. A descriptive and co-relational method of research was used in conducting the study. The sample for the study consisted of teachers working at different level in seven co-educational and two girls' polytechnics of the state. The tools used in the study were Burnout Inventory and Job satisfaction scale. Hypotheses were formulated and tested. It was found that there is a significant relationship between teacher burnout and job satisfaction amongst the polytechnic teachers. More conclusions have been drawn as a result of the study and a set of recommendations have been put forward for the Heads of the polytechnics, Administrator of technical education and the Government in general.

Keywords

Teacher burnout, Job satisfaction

Introduction

Polytechnics are technical institutions offering courses and programmes in the field of engineering and technology at diploma and post diploma levels for producing technician engineers. These institutions have to play a key role in industrial restructuring on the technology dimension by training and retraining and continuous development of quality technician engineers required by the industry. The polytechnics must build excellence by improving its quality, effectiveness, equity, efficiency and culture (Malhotra et.al, 1993). This would call for greater responsibility on the part of teachers who work in these institutions and therefore their satisfaction is of paramount importance.

Of particular concern is the impact of teachers stress and burnout on the teaching process itself especially in polytechnics with preponderance of disadvantaged students who can ill-afford deterioration in teacher's motivation and commitment. The consequences of teacher burnout extend beyond dissatisfaction or tension, as burnout appears to be a main factor in teachers' decision to leave the profession in many countries. Thus, measuring the levels of burnout in the educational context is necessary in case we wish to employ preventive and restorative strategies to tackle the phenomenon early. It is in this context that such a study for the polytechnic teachers in the largest state of India, namely Uttar Pradesh was conceived and conducted.

Objectives of the Study

1. To investigate the level of Burnout and Job satisfaction of teachers in polytechnics of Uttar Pradesh
2. To investigate the relationship of Burnout with job satisfaction of teachers in polytechnics of Uttar Pradesh
3. To investigate the relationship of age and experience with burnout of teachers in polytechnics of Uttar Pradesh
4. To investigate the difference in burnout of male and female teachers
5. To investigate the difference in burnout of teachers teaching engineering and non-engineering subjects

Hypotheses

Five hypotheses were formulated for the study:

1. There is no significant relationship between teacher burnout and job satisfaction in Polytechnics of Uttar Pradesh.
2. There is no significant relation between age and burnout; and between experience and Burn out among teachers in the polytechnics of Uttar Pradesh.
3. There is no significant relationship between job satisfaction and age; and job satisfaction and experience of teachers working in the polytechnics of Uttar Pradesh.

4. There is no significant difference between burnout of male and female teachers of Polytechnics of Uttar Pradesh.
5. More of the non-engineering teachers in the polytechnics of Uttar Pradesh are burnout than engineering teachers.

Methods and Procedure

Research Design

Since the study was concerned with determining relationships of burnout with job satisfaction, age, gender, experience and discipline of teaching; a descriptive and co-relational method of research was used in conducting the study.

Sample:

The sample of the study consisted of gazetted teaching staff, working at the level of lecturers, Senior Lecturers, HODs and Principals working in the 7 co-educational and 2 girls polytechnics of Uttar Pradesh. A sample of 160 teachers, both male and female, was selected based on convenience sampling out of about 236 teachers working in these 9 polytechnics of Uttar Pradesh.

The teachers constituting the sample possess M.E., B.E., B.Sc. (Tech.) or equivalent, Diploma Technical Teaching (TTTI) or M.A./M.Sc./M.Com. qualifications. The sample included teachers in the age up to 30 years, (58 No.); more than 30 to 45 years (58 No.); and above 45 years (44 No.); male teachers (132 No.); and female teachers (28 No.); 1 to 5 years of experience (52 No.); more than 5 to 15 years of experience (59) and above 15 years of experience (49 No.); engineering discipline teachers (128 No.); and non-engineering discipline teachers (32 No.).

Table 1 shows the breakup of the sample taken for the study:

| Sr. No. | Name of Polytechnic in Uttar Pradesh state | No. of Teachers in position in Polytechnic | No. of Teachers taken for Study |
|--------------|--|--|---------------------------------|
| 1 | G.B. Polytechnic, Lucknow | 35 | 21 |
| 2 | Hewett Polytechnic. Lucknow | 5 | 3 |
| 3 | Jawaharlal Nehru Polytechnic ,Kanpur | 15 | 9 |
| 4 | Lucknow Polytechnic Lucknow | 20 | 14 |
| 5 | Sanjay Gandhi Polytechnic, Jagdishpur | 20 | 16 |
| 6 | Sri Ram Devi Ramdayal Tripathi Mahila Polytechnic, Govind Nagar, Kanpur (West) | 40 | 31 |
| 7 | United Institute of Designing, Kanpur | 31 | 23 |
| 8 | Prasad polytechnic, Lucknow | 35 | 23 |
| 9 | Government Girls polytechnic, Lucknow | 35 | 20 |
| TOTAL | | 236 | 160 |

Table 1: Break-up of Sample

Tools Used:

The following tools were used for the study:

- Burnout Inventory (1986), developed and standardized by Menon and Dutt (1996) on the lines of Meshach Burnout Inventory, was used to measure teacher's burnout
- Job satisfaction scale, developed by Chandel (1978) was used to measure job satisfaction of teachers.
- An information schedule was prepared to gather the data related to age, sex, experience, qualifications, marital status, designation, discipline of teaching etc.

Description of Tools:

1- Burnout Inventory by Menon and Dutt (1996):

Burnout Inventory by Menon and Dutt (1996), prepared on the lines of Meshach Burnout Inventory (MBI 1986), was used to measure teacher burnout. This questionnaire consisted of 40 statements (out of which 28 statements are worded in positive direction and 12 statements are worded in negative direction). The total score is the summation of all the positive and negative items score. The minimum score obtained can be zero and maximum 240 and other scores ranging in between. In data processing all items shall be scored so that a high score on the burnout scale would indicate a higher level of self reported burnout. Reliability obtained for the whole burnout scale by test- retest method was 0.82.

2- Teacher's Job Satisfaction Scale by Chandel (1978):

Teachers' job satisfaction scale by Chandel was developed in the Indian situation for the people engaged in different jobs. The scale was planned for self administering individual or group test. It was constructed keeping in view three aspects (1) Personal (2) Job related (3) Social.

The scale consisted of 24 items covering the vast areas of job satisfaction or dissatisfaction. The reliability of the test as a whole had been reported as +0.942 which was based on the test-retest method. This value of reliability must be treated as fairly high. Item wise test-retest correlations were found to be between +0.621 and +0.950. All the values of the co-efficient of correlation were significant at 0.01 level of significance. It was found that the scale had good face validity and content validity. In cross validity it was found that relationship between the two groups (from two populations) had +0.69 which means that the relationship between the results or the two situations was positive and high

3- Information schedule:

An information schedule was designed to elicit the requisite information i.e. name, sex, age, marital status, present designation, details of promotion, educational qualifications, total years of teaching experience, number of years of industrial experience, if any, and, address.

Statistical Analysis of Data

Descriptive Statistics

Mean (M), median (Md), mode (Mo) and standard deviation (SD) were computed to study the general nature of data with respect to Burn-out score and Job-Satisfaction score. Skewness (SK) and Kurtosis (Ku) were also worked out to see the trend of departure of the sample distribution from the normal probability curve.

Inferential Statistics

Co-efficient of correlation (r) and t-test were also computed to test the hypotheses.

Description of Data

The collected data were analyzed separately for (1) Burnout scale developed by Menon and Dutt and (2) Job-satisfaction scale developed by Chandel. The computed values of mean, median, mode, standard deviation, skewness, kurtosis and frequency distribution of Burnout and job satisfaction of total sample (N) have been given in Tables 2 and 3.

Table 2: Frequency distribution of Burnout scores of the total sample

| Class Interval | Frequency | Mid Point |
|----------------|-----------|-----------|
| 121-130 | 125.5 | 2 |
| 111-120 | 115.5 | 2 |
| 101-110 | 105.5 | 1 |
| 91-100 | 95.5 | 3 |
| 81-90 | 85.5 | 9 |
| 71-80 | 75.5 | 13 |
| 61-70 | 65.5 | 15 |
| 51-60 | 55.5 | 21 |
| 41-50 | 45.5 | 26 |
| 31-40 | 35.5 | 36 |
| 21-30 | 25.5 | 14 |
| 11-20 | 15.5 | 11 |

| | | |
|------|-----|---|
| 1-10 | 5.5 | 7 |
|------|-----|---|

N = 160
 M = 49.35
 Md = 45.615
 Mo = 37.875
 SD = 24.794
 SK = 0.452
 Ku = 0.313

Table 3: Frequency distribution of job-satisfaction of the total sample

| Class Interval | MidPoint | Frequency |
|----------------|----------|-----------|
| 111-120 | 115.5 | 7 |
| 101-110 | 105.5 | 10 |
| 91-100 | 95.5 | 39 |
| 81-90 | 85.5 | 47 |
| 71-80 | 75.5 | 27 |
| 61-70 | 65.5 | 19 |
| 51-60 | 55.5 | 8 |
| 41-50 | 45.5 | 3 |

N = 160
 M = 84.244
 Md = 85.89
 Mo = 88.14
 SD = 14.44
 SK = 0.342
 Ku = 0.313

Similar values were also calculated for age and teaching experience of the total sample and are shown in Table 4.

Table 4 lists the value of mean, median, standard deviation, skew ness and kurtosis for the variables of Burnout, job-satisfaction, age and experience,

Table 4: Values of Descriptive Statistics

| Sr. No. | Variable | Mean | Median | SD | SK | Ku |
|---------|---------------------|--------|--------|--------|--------|-------|
| 1. | Burnout | 49.35 | 45.615 | 24.794 | 0.452 | 0.33 |
| 2. | Job Satisfaction | 84.244 | 85.89 | 14.44 | -0.342 | 0.313 |
| 3. | Age | 37.244 | 30.61 | 10.444 | 1.906 | 0.313 |
| 4. | Teaching Experience | 12.195 | 7.439 | 11.178 | 1.276 | 0.313 |

Skewness Significant at 0.01 level = + 0.497

Skewness Significant at 0.05 level = + 0.378

Kurtosis Significant at 0.01 level = - 0.735 to 1.261

Kurtosis Significant at 0.05 level = - 0.495 to 1.021

Burnout Variable:

For the burnout variable, the value of mean and median showed a departure from each other. The value of standard deviation (24.794) represented the scattered scores from mean position. Therefore, the burnout in different teachers was different. The value of the skewness (0.452) however did not exceed the acceptable limits at 0.01 level of significance, but slightly positively skewed at 0.05 level of significance. The curve was positively skewed to the right meaning thereby the amount of variation in the burnout among the people having burnout more than the mean is high. The value of kurtosis (0.313) was well within safe limits at 0.01 level of significance showing a mesokurtic distribution for variable of burnout. Therefore, the burnout variable followed normal distribution meaning thereby that while some of the teachers were highly burnout and some were least burnout, the majority were average burnout.

Job Satisfaction Variable:

The value of mean and median was slightly different from each other for the variable of job-satisfaction. The value of skewness (-0.342) and Kurtosis (0.313) however did not exceed the acceptable limits at 0.05 level of significance, thereby showing a mesokurtic distribution for this variable. Thus, the job satisfaction variable followed normal distribution curve, meaning thereby that some of the teachers were highly satisfied, some were least satisfied but the majority had average job satisfaction.

Age Variable:

The value of mean and median was different from each other for the variable of age. The values of skewness (1.906) is significant at 0.01 level of significance, thereby showing skewed and mesokurtic ($ku = 0.313$) distribution for this variable. The amount of variation in age among the teachers having age more than the mean was high.

Teaching Experience:

The value of mean and median was different from each other for the variable of teaching experience. Value of skewness (1.276) is however significant at 0.01 level of significance, thereby showing a skewed and mesokurtic (0.313) distribution for this variable.

To conclude, the value of mean, median, standard deviation, skewness and kurtosis for the various variables did not show large variations and there was not much departure from normality. Thus, the data can be considered appropriate for computing further statistical analysis.

Analysis of Data and Discussion of Results

Here the product moment correlation computed between variables of burnout and job satisfaction; burnout and age; burnout and teaching experience; job Satisfaction and age; job satisfaction and teaching experience; and age and teaching experience have been presented and statistically significant results have been discussed. The values of 't' have been computed to determine the significant difference in burnout among different age groups and different teaching experience. The values of product moment correlations are given in Table 5.

Table 5: Product Moment Correlations

| Variables | 'r' |
|--|-----------|
| Burnout and job satisfaction | - 0.532 * |
| Burnout and age | - 0.085 |
| Burnout and teaching experience | - 0.094 |
| Job satisfaction and age | 0.158 ** |
| Job satisfaction and teaching experience | 0.158 ** |

* Significant at 0.01 level of significance, $df = 158$

** Significant at 0.05 level of significance, $df = 158$

Interpretation and Discussion of Results of Correlations

Burnout and Job Satisfaction:

The co-efficient of correlation between burnout and job satisfaction was found to be negatively significant (-0.532) at 0.01 level: thus; burnout has negative and significant relationship with job satisfaction. Hence the hypothesis that there is no significant relationship between burnout and job satisfaction stands rejected. The studies conducted by David (1990) and Sadek (1991) also support the above finding. The teachers who have no difficulty in adjusting to the work environment and feel satisfied; are less burnout. As the job satisfaction declines; burnout increases.

Burnout and Age:

The value of correlation (-0.085) shows a negative but insignificant relationship between burnout and age. This means the extent of burnout is same irrespective of differences in age. Hence; the hypothesis that there is no significant relationship between burnout and age stands retained. The study conducted by Mulkins (1991) also supported the above finding.

Burnout and Teaching Experience:

The value of correlation (-0.094) shows a negative but insignificant relationship between burnout and teaching experience. This means the extent of burnout remains the same irrespective of differences in teaching experience. Hence, the hypothesis that, there is no significant relationship between teaching and burnout stands accepted.

The study conducted by Chukwuemeka (1990) and Sadek (1991) stated that the experienced persons will be less burnout; as experienced persons generally gain better position and scope to exercise their power and ability in decision making.

Job Satisfaction and Age:

The value of correlation (0.158) shows a positive and significant relationship between job satisfaction and age at 0.05 level. This means that age has positive and significant relationship with job satisfaction therefore; the hypothesis that there is no relationship between job satisfaction and age stands rejected.

This finding is supported by the findings of David (1990) and Sadek (1991). A major reason of high job satisfaction with older teachers is their adjustment to the work environment and feeling of satisfaction; whereas the younger teachers find difficulty in adjusting to the work environment.

Job Satisfaction and Teaching Experience:

The value of correlation (0.158) shows positive and significant relationship between job satisfaction and teaching experience at 0.05 level. This means that more the teaching experiences a teacher has; more the job satisfaction he enjoys. Hence the hypothesis

stating no positive and significant relationship between job and teaching experience satisfaction stands rejected.

The finding is supported by findings of Chukwuemeka (1990) and Sadek (1991). The experienced persons generally gain better position and scope to exercise their power and ability in decision making; so they enjoy better job satisfaction.

Computation of Significance of Difference between Means (T-Test)

In order to draw statistically significant inference and to test hypotheses t-tests were computed to determine the effect of age, gender, teaching experience and discipline of teaching on burnout of teachers. Values of 't' are given in Table 6.

Table 6: 't' ratios of means of burnout scores in different groups

| Groups | N | M | SD | t-value | Level of significance |
|--|-----|--------|---|---------|-----------------------|
| Age Group I | 58 | 49.982 | 25.973 | 0.674 | 0.05 level |
| Age Group II | 58 | 53.051 | 22.949 | | |
| Age Group II | 58 | 53.051 | 22.949 | 1.993* | |
| Age Group III | 44 | 43.636 | 24.508 | | |
| Age Group I | 58 | 49.982 | 25.973 | 1.252 | |
| Age Group III | 44 | 43.636 | 24.508 | | |
| Male | 132 | 50.402 | 24.779 | 1.168 | |
| Female | 38 | 44.393 | 24.26 | | |
| Experience I | 59 | 52.644 | 27.525 | 0.714 | |
| Experience II | 52 | 49.288 | 21.407 | | |
| Experience II | 52 | 49.288 | 21.407 | 0.838 | |
| Experience III | 49 | 45.448 | 24.023 | | |
| Experience I | 59 | 52.644 | 27.525 | 1.436 | |
| Experience III | 49 | 45.448 | 24.023 | | |
| Engg Disc. | 128 | 49.797 | 24.70 | 0.446 | |
| Non-Engg Discipline | 32 | 47.563 | 25.087 | | |
| Age Group – I is up to 30 years | | | Experience I is 1 to 5 yrs. | | |
| Age Group – II is more than 30 to 45 years | | | Experience II is more than 5 to 15 yrs. | | |
| Age Group – III is above 45 yrs | | | Experience III is above 15 yrs. | | |

Interpretation and Discussion of Results:

T-ratio for burnout of age group II and III was found to be significant (1.993) at 0.05 level of significance. This means teachers in age group II (i.e. 31 to 45 years of age) were more burnout than those in the age group III (above 45 yrs). The finding is supported by findings of Sadek (1991). To keep the burnout level low of the teachers in age group II (31 to 45 yrs), government /administrators should initiate necessary steps, so that the teachers should not have any stress in adjusting to the work environment and feel satisfied. Steps may be giving promotion and other benefits in time; ensuring good work environment etc.

t-ratio for burnout of male and female teachers was found to be insignificant (1.168) indicating that both male and female teachers are equally burnout .

t-ratios for burnout of teachers with different experiences were found to be insignificant (0.714, 0.838 and 1.436) indicating that the teachers with different experiences are also equally burnout.

t-ratio for burnout of engineering discipline and non-engineering discipline was found to be insignificant (0.446). Here also, the teachers teaching both engineering and non-engineering disciplines are equally burnout, as both are working in the same work environment.

Conclusion

On the basis of findings of the study, it can be concluded that:

1. There is a significant relationship between teacher burnout and job satisfaction in polytechnics of Uttar Pradesh.
2. A significant and positive relationship was found between job satisfaction and age. Similar correlations were also observed between job satisfaction and experience, and between age and experience.
3. The significance of difference in experiences in burnout of teachers with different teaching experiences was found to be insignificant.
4. It was found that there is no significant difference in burnout between burnout of male and female teacher of polytechnics of Uttar Pradesh.
5. The significance of difference between means of burnout of engineering teachers and non-engineering teachers was found to be insignificant. Here also both are equally burnout, as both are working in same work environment.

Recommendations

1. Since the younger teachers are more dissatisfied, therefore, in order to increase the job satisfaction of younger and newly appointed teachers, the job of teaching should be made more attractive and proper facilities conducive for teaching should be provided. They should also be assured of timely promotional opportunities and greater degree of freedom in decision making.
2. Lack of leadership qualities amongst the top management often results in job dissatisfaction and consequently burnout amongst the teachers for want of clear direction. It is in this context that it is recommended that the administrators of technical education should provide management training programmes to the principals to develop in them the qualities of leadership.
3. Administrator of technical education should also have periodic psychological examinations during the service period of teachers. The Government should set

up guidance and counseling centers in the polytechnics to deal with emotional problems of the teachers.

4. Principal as head of institution should initiate action to lead the teachers towards achievement of educational goals. He/She must infuse trust among the teachers and develop a warm and friendly relationship with them, which can lead to high job satisfaction among teachers. Principal should take steps to eliminate or reduce factors that result in teacher's disengagement.
5. For increasing job satisfaction and reducing 'burnout', the principal should encourage and promote social activities among teachers. The institutions can have social clubs with facilities for indoor and outdoor games for teachers and their families. A free, fair and open climate in the institute can certainly result in higher educational achievements and higher job satisfaction and low burnout among teachers.
6. Appreciation and recognition of teacher's achievements should be ensured. State awards should be instituted for teachers whose students excel in their respective subjects in the state council examinations.
7. The government should provide staff development incentives for teachers. Scholarships should be given and teachers be motivated to enhance their education by giving study leave and paid study leaves where necessary. Teachers, who improve their educational qualification, should be recognized through award of increments or promotion.
8. Education administrators (i.e. Director, Secretary and Commissioner) must visit the polytechnics on regular basis to make personal contact with the teachers to encourage them and to alleviate their genuine grievances.

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