

Impact of Teachers' Stress on Academic Performance of Public School Students

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The teachers of any school are the key players to maintain the standard of academic performance of students, but the efficient working is most likely depend upon their mental and physical peace as a function of adequate control over coping with stress. By keeping in mind the above facts, the present study was conducted on 100 public school teachers and 100 public school students. Both were taken from government schools. A teacher's stress inventory Maths and Hindi test was applied. The results was analysed by using t – tests. The results indicate that three facets of teachers stress were found significant for Math achievement and two facets of teachers stress and total teacher stress were found significant for Hindi achievement of students.

Keywords: Achievement Kingpin, Stress, Academic Performance.

India is being a largest country having more primary schools with approximately hundred million children of primary school age. In 1999 officially the enrollment ratio was 100 percent but this is not true. It is commonly estimated that 20-30 million primary age children in India never go to school. The proxy primary completion rate was estimated for India (76 percent in 1999) confirms that 25 percent of children do not even complete the five years primary cycle.

The performance of students depends upon the schooling processes as well as teachers' efforts. The profession of teaching has a very prestigious place in all professions. A teacher is a kingpin in the entire system of education. Almost all cultures of the civilized world have considered their teachers in a very high esteem. But now-a-days teaching profession is considered one of the most stressful professions. Hammond and Onikama (1997) has rightly pointed out that pressure due to school reform efforts; inadequate administrative support, poor working conditions lack of participation in school decision making, the burden of paper

work and lack of resources have all been identified as factors that can cause stress among school staff.

Stress is a term which was used to refer to hardship, strain, adversity or affliction. Wingate pointed out "as any influence which disturbed natural equilibrium of the body and includes within its reference physical injury, deprivation, all kinds of disease and emotional disturbances. Stress is an important topic for social scientists, which has its impact in all sphere of life, hence various models and theories have been proposed such as interactional model, cognitive model, person-environment model etc to understand its causes, effect on human behaviour.

So far as teachers' stress is concerned, Kyriacou (1987) has rightly pointed out that "the experience by a teacher of unpleasant emotion such as tension, frustration, anxiety, anger, and depression resulting from aspects of work as a teacher. These are reasons why we come across about various unlawful acts on the part of teachers. Teaching has been identified as one of the most stressful

professions today. According to Health and Safety Executive Survey, teaching came out on the top and as per survey of NUT (1999), published in 2000, 41.5% of teachers reported themselves 'highly stressed', while 58.5% came out into a 'low stress category, while 36% of teachers felt the effects of stress all or most of the time. The figure from Teacher's Support Line (TSL, 2000) showed different reasons that cause distress to teachers: Stress, anxiety and depression 27%, Conflict with managers or colleague 14%, Pressure of workload and excessive changes 9%, Relationship, marital and family problems 5%

The reasons of stress may be related to on the jobs or off the jobs but it creates problems on the academic performance of students. A number of causes of stress for teachers have been identified over a period of time (Abel & Sewell, 1999; Adams, 2001; Brown & Ralph, 2002; Dick & Wanger, 2001; Cooper, 1996; Hart et al., 1995; Jones & Fletcher, 1999; Proctor, 1994; Pithers & Soden, 1998; Tollan 1990; Travers & Cooper, 1996). All these studies can be divided into three categories ad related to the person, job of teaching and the environment in which the teacher works.

The Person related: lack of professional satisfaction and problems, coping with change, emotional demands of teaching, being evaluated by others, dealing with colleagues etc. The Teaching related: class size, maintaining disciplines, pupil's attitudes and behavior, non-participation by pupils, high pupil teacher ratio, and problems related to the curriculum etc. The Working Environment related: low status of teaching, lack of respect for teachers, role conflict and role ambiguity, time pressure, heavy workload out of proportion with salary, lack of support from management, poor facilities, work routine etc. It is established fact that the academic performance of students is largely depending upon teacher's role. If the teachers are stress

free they can teach, guide the students properly otherwise it will effect negatively. Siegel and Shanghressy (1994) found that academic performance of students depended largely on the teaching being in the classroom and their positive behavior towards students. It has been rightly pointed out by Hines (1986) that teachers who utilize positive behavior directly influences students' achievement. It is only possible when a teacher is free from stress, strain and anxiety.

In this study the performance of students has been taken in the sense of academic achievement which is considered as a key criteria to judge total capabilities, abilities and potentialities of students. Academic achievement generally indicates the learning outcomes of pupil Good (1973) defined, academic achievement as knowledge, attitude, or skill developed in school subject usually designed by test scores or by marks assigned by teacher or by both. The performance of students does not only affected by teacher's stress but by various other factors such as higher level of poverty (Apostal & Bilden, 1991; Markstrom et al., 2000), rural and urban environment (Grewal & Singh 1987; Roscigno & Crowley, 2001); role of gender (DuBois et al., 2002); Heffer (2005) studied prediction of homework completion and academic achievement; Ling (2003) studied the relationship of organizational health and safety to student achievement; Elisa (2003) the relationship between school climate and student achievement.

Recent survey of relevant literature reveals the fact that there is no any direct research study related to impact of teachers' stress on students academic performance, although scores of studies are available on indentifying causes of stress on teachers.

Objectives:

(i) To identify the stress level of public school teachers.

(ii) To find out the impact of teachers' stress on academic performance of public school students

(iii) To find out the academic performance of public school students.

(iv) To suggest specific strategies to reduce stress level among teachers and

(v) To suggest techniques to enhance academic performance of students.

Method

Sample:

The study was conducted on teachers and students of (100 teachers and 100 students) of Public Schools of Aligarh district. The age range of Students 11 to 13 years and age range of teachers was 25 to 40 years. t-test was used to analysed the data.

Measures:

The teachers stress inventory (TSI) consists of 62 items for which five alternatives ranging from "fully agree", agree, undecided, disagree, & fully disagree are provided. The teachers stress inventory was developed by the investigator. The item measures for dimensions namely, Job demand, Role conflict, Job control, In service support, Interpersonal relationship, Change and development, Role ambiguity, Working conditions, Unprofitability, and Responsibility of students.

A pilot study was conducted using the teachers stress inventory on a sample comprising of 100 school teachers. They were taken from various schools based in Aligarh. After an interval of 1 month, again the same test was administered to the same group to find out the reliability of the test. The reliability of the questionnaire was established using "test-retest" method on a sample of 100 teachers. The reliability of the scale was found to be above 0.5 in all the dimensions except, Job control, change and development, and responsibility of students. The validity of the

questionnaire was established by means of content validity. Maximum the scores indicate high level of stress, and minimum score indicates low level of stress.

To measure academic achievement of students in Maths and Hindi a achievement test was developed. For both outcomes objective types of questions from prescribed books were framed and conducted on a sample of 100 students for pilot study. Then difficulty values, discriminative powers were found out for Math and Hindi. Then finally 40 objective types of questions for Math and Hindi were selected for final data collection.

Results and Discussion

Table 1 Significance of difference between groups on Math Achievement

Group	N	Mean	SD	t
Academic Achievement Maths				
Low JD	46	24.70	45.785	2.144
High JD	45	21.71	56.866	
Low CD	45	22.20	67.188	2.245*
High CD	48	22.35	45.143	
Low RS	52	25.52	14.360	4.172**
High RS	42	19.79	5.517	

*p<0.05 **p< 0.01

Table-1 reveals the fact that out of ten facets, only three facets of teachers' stress namely; job demand, change and development, and responsibilities of students have found to have significant influence on math achievement of public school students. The obtained value of t=2.144 are found to be significant at 0.01 levels. It means that teachers having high stress on job demand has significant effect on maths performance of students as mean score of students (M=21.71) is less than those of low stressed teachers where maths achievement of students (M=24.70) is higher. The reasons of high stress are many. It is in fact true that the public school teachers have to do many works at a time. They have perception that

the school working hours are more, they do work even after school hours, they are imposed time bound work, there is less flexibility regarding working arrangement, hence, they become unable to make balance between home and school work. All these factors create high stress among teachers and as a result the academic performance of students is affected. This can be ascertaining from the mean achievement of students. Thus hypothesis that the high level stressed would have adverse affect of academic performance of students has been accepted.

For the second facet, the obtained value of $t=2.245$ are found to be significant at 0.01 level of confidence. The second facet which has been found significant is change and development. Similar pattern of results have been found here. Mean scores of academic achievement on Maths of students are $M=22.20$ & $M=22.35$. it means that change and development creates stress among teachers particularly for those teachers who perceive it's as stressful.. The public school teachers have the perception that their participations are not sought for any types of change at school level. They have perception that they are not consulted for any matter of change and development rather they are imposed to follow the instructions of higher authorities. They are not asked to participate in any decision making process. Hence, they feel high level of stress and as a result the performance of students is affected.

It is evident from the table-1 that responsibilities of students; a facet of teachers stress was found to be significant at 0.05 level of confidence as $t=4.172$ are found to be highly significant. It shows that highly stressed teachers has their impact on students math achievement. It is also clear from the mean values given in table-1. The achievement of students with low stressed teaches are more ($M=25.52$) as compared with high stressed teachers ($M=19.79$).

Now a day the teachers are expected to take responsibilities of students as well as the overall development of students and this responsibility put them under stress. In addition to teaching to the students, the teachers have to do many more extra-curricular activities for students. The teachers having high level of stress has more negative influence on the performance of students as compared to those teachers who have low level of stress.

Table 2 Significance of difference between groups on Hindi Achievement

Variables Group	N	Mean	SD	t
Academic Achievement Hindi				
Low CD	45	20.89	61.55	2.237*
High CD	48	19.58	6.212	
Low RS	52	25.69	6.571	5.218**
High RS	42	18.88	6.173	
Low Total TS	40	23.15	8.521	2.112*
High Total TS	41	17.63	7.285	

* $p<0.05$ ** $p<0.01$

The Table – 2, showing significant of difference between groups on Hindi achievement of students. Similar types of results have been obtained from Hindi and Maths achievement expects the impact of one facet of teachers stress. The obtained value of $t=2.237$ for change and development are found to be significant at 0.001 levels. It shows that teachers stress has significant effect of Hindi achievement. The explanation can be same in this context too.

So far as responsibility of students – a dimension of teachers is concerned, the obtained t value of $t = 5.218$ are found to be significant at 0.05 levels. It shows that level of stress of this facet has significant effect on Hindi achievement of public school students. At the look of means of low and high groups indicates that mean scores of students differ. The mean scores associated with high level of teachers stress was found ($M=18.88$)

to be less as compared to low level of teachers stress (M=25.69). It means that level of teachers stress effects the Hindi achievement of public school students. The reasons have already been explained in Table – 1 and the same can be applied here.

So far as influence of total teachers stress on Hindi academic achievement of public school students is concerned, it found significant. The obtained value of $t=2.112$ are found to be significant at 0.01 level. It simply shows that high level of teachers stress has significant effect on Hindi achievement of public school students. At the look of means of two levels of stress-low and high, indicates that mean scores of high stress level is (M=17.63). It means that the Hindi achievement of students related to high stressed teacher is lower even below average as compared to low stressed teachers where mean scores of students is higher (M=23.15).

The public school teachers have the perception of high level of stress. The reasons are very much obvious. They have always been assigned different types of governmental work. So they have role conflict. The working conditions are not conclusive. They are not involved in policies making and any type of change and development. They do not get any type of support and above all they have the full responsibilities of students. Due to all these factors, the public school teachers have the perception of high stress and as a result the Hindi achievement of students gets affected.

Conclusion

From the above results we can conclude that only three facets namely; job demand, change and development and responsibility of students, of teachers stress and total stress were found significant influence on academic performance of public school students. Out of these two facets were found common in both Maths and Hindi achievement of public school students. It is also clear that

high level of teachers' stress effect achievement of students. If the level of stress is high the achievements of students are low and on the other hand the academic achievement is high if the teachers are less stressed. It is suggested that the teachers must be counsel by competent counselors and psychologists to reduce the level of stress, so that they may able to discharge their duties effectively. The level of stress can be brought upto moderate level by reducing work load, by defining roles, by improving working conditions and involving teachers in the affairs of schools

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