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Abstract

Stress is an important area of study in social sciences as it result in multiple complications. People suffering from stress encounter issues of productivity. It is the case with the teachers when they suffer from stress affect their self-efficacy. The current study attempted to find out the relationship between teacher's stress and self-efficacy. The study is based on quantitative research technique and a sample size of 622 teachers selected through multistage sampling technique. Regression analysis was applied to determine the relationship between the variables. the findings of the study show that increase in the stress decreases the self-efficacy among teachers. The Adjusted R Square value of .898 suggests that the model is a good fit, as it takes into account the number of predictors included in the model. Similarly, for every one unit increase in Parent/ Teachers Relations, Time Management, Employee/ Administrator Relation, or Teacher/ Teacher Relations, the Teacher Self Efficacy score is expected to decrease by -.397, -.383, -.395, and -.396 units, respectively, holding all other predictor variables constant.

Keywords: Stress, Self-efficacy, Regression

1. Introduction

Education is the one of the top prioritized tasks of the governments across the globe. In the modern and post-modern era, the worth of education is enhanced because all of the modern and post-modern developments and inventions are based on the quality of education. The current age is specifically related with the information technology and artificial intelligence. The conventional ways of education are almost ended because now the modern inventions and new software developments' worth is much higher than the whole of the respective organization etc. In such circumstances, the quality of education has become the concern of all countries. The most of the countries face the shortage of quality educators. The main reason behind the shortage is the low level of self-efficacy among the teachers, which led to stress among the teachers (Hong, 2012).

The issue of the shortage of quality teachers is increasing which is mainly linked with the departure of the teachers from the educational sector. They retire from their jobs due to the stress they face during their duty hours. Such early retirement is further adding issues for the quality teachings. The teachers have to face many stressful conditions i.e. lack of spirit, limited facilities, communication gap between teachers and students, the high volumes of the students and other issues (Hong, 2012) .

1.1. Teachers' Stress

Stress is any internal or external condition, which has negative consequences over the physical and psychological aspects of the human being. The teachers' stress is also something, which negatively affects the physical and psychological conditions of the teachers (Collie et al, 2012). For example, the teachers often experience the unpleasant emotions, which interrupt their working conditions. Such unpleasant conditions have further varied causes, which collectively try to overcome their obligations.

The present age has a variety of the social scientists to address the stressful conditions of the teachers, which shows the great concern of the topic. According the existing studies, there are numerous triggers of stress known as stressors, which create stress among the teachers. They have to take on these stressors in order to accomplish their duties accordingly (Betoret, 2009). Some of the teachers quit their jobs in result of such stress while the other continue their jobs to meet their economic needs but in return, they have to lose so much. The stress not only affect their performance but also distress their social life as well (Hakanen et al, 2006).

The different authors identified the differ aspects of the stressors according to the limits and objectives of the researches. Collectively, there are prominent stressors lead to stress among the teachers. The most important stressors are misbehavior of the students, discipline related problems, workload, the lack of motivation of the students, pressure of time, large students, diversity of the students, disrupted relations with colleagues, the lack of administrative support and conflict among values (Kokkinos, 2007).

Both internal and external stressors drive the stress of the teachers. The above-mentioned studies mainly highlighted the internal stressors i.e. school environment, disruptive behavior of students, and limited resources etc. On the other hand, there are also some external factors involved to create teachers' stress. For example, the social responsibilities, family issues, the community problems, the traveling issues and the other external forces also play role as stressors for the teachers (Gilbert et al., 2014). In accordance to above-mentioned studies, the teachers' stress is found across the globe. It is not an issue for the poor and developing countries but the developed countries like US and Norway are also facing the same problems. The teachers in the developed countries too confronting the misfit problems related to execution of their duties (Helms-Lorenz at al., 2011). The main difference between developing and developed world is coping the problems.

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The developed countries have more resources so they are managing the teachers' stress for better out properly. On the other hand, the countries like Pakistan do not have much resources hence the teachers of such countries are having more stress-related issues.

1.2. Self-Efficacy

The theory of self-efficacy is actually a motivation theory presented by Albert Bandura. The main idea of self-efficacy is related with the performance of certain duties. It asserts the motives behind the better performance. On the same time, the factors of declining self-efficacy are also discussed within the same perspective, which needs to address on urgent bases to increase self-efficacy. The concept of self-efficacy is not associated that how talented the individuals are but its prime objective is to explain the abilities of those individuals based on their available resources (Çapri & Çelikkaleli, 2008).

The concept of self-efficacy is mainly discussed in the professional fields i.e. teaching. The teaching field has much importance in all countries as it guarantees the successful future generations. If the teachers perform their duties in the wake of self-efficacy, it means it will produce better results. It consists of the well organization and interconnectedness of different organizational components. When a teacher performs his/her duties in proper way and has all required resources, means the self-efficacy is achieved. It provides the better results and performance (Çapri & Çelikkaleli, 2008).

Self-efficacy is the judgement about the personal abilities and qualities. The self-efficacy is mostly judges in the professional and demanding fields especially in such cases where the national interests lies. Self-efficacy is also judged in the educational sectors as well in the modern societies. It requires the abilities of the teacher to handle all the surrounding issues and to perform in a better way. In the contemporary times, the teachers are confronted with number is job related problems which need to handle to improve their performance (Caprara et al, 2006).

1.3. Teachers' Self-Efficacy

Self-efficacy is similarly important for the teachers as well. In the modern and developed societies, the employees' performance is judged based on the facilities provided to them. The organizations and institutions strive to provide all of the required facilities and resources to them so that they may perform in better way in the developed countries (Caprara et al, 2006).

In the similar way, a special concern is also shown to the teachers' self-efficacy as well. The teachers' self-efficacy is not examined only in the developed countries rather the developing and under-developed countries are also doing the same. The belief of self-efficacy is inter-linked with the job loyalty and satisfaction. The teachers who have self-efficacy are more likely to love to perform their duties in proper way (Bolton, 2018). There is also ranking among the different teachers in the perspective of self-efficacy. For example, the teachers with high ranks of self-efficacy mostly have better outcomes. They have strong inter-personal relationships with their colleagues. They also maintain strong interactions with their boss and coworkers, which indicate that they are satisfied with their jobs. Furthermore, the self-efficacy also assures the high level of confidence among the teachers (Pillay et al, 2005).

Job satisfaction and self-efficacy are two interconnected variables, which maintain the professionalism among the teachers. A teacher with self-efficacy is regular is doing her job and imparting the teaching duties. Such teacher is well engaged with the students also, which enhances the student-teacher interaction an important determent of better performance. The students have regular interaction with such teachers, which provides the friendly platform for the students as well (Buluç & Demir, 2015). The self-efficacy also provides the assistance to handle the stress and other job-related problems. It means that the teachers own the problems and consider the part of their routine job as every job is encircled with numerous problems. They are also motivational and teach their students how to cope with the same situations in their practical lives. Their role is like that of a motivational candidate who motivates the community to achieve their targets (Scholz & Schwarzer, 2005).

The developed nations have sufficient resources to meet the needs and demands in time. However, contrary to that, the developing and under-developed countries are facing many issues regarding the self-efficacy of the teachers. The teachers in such countries are confronting the many environmental and management related issues (Caprara et al., 2006). For example, the teacher in Pakistan are not mostly well equipped. They even lack the necessities to perform their duties. Most of them are accidently teachers because they have some other specialization but in the wake of fewer job opportunities, they adopted the teaching profession. In such circumstances, they do not have stable relations with their partners and teachers. All of such circumstances lead to create stress among themselves and collectively lead to low self-efficacy (Greenglass & Burke, 2003).

1.4. Teachers' Stress and Self-Efficacy

Teaching is one of the stressful occupations. It requires particular expertise to be successful in this field. The teachers who pass through specific professional courses have more chances to be fit in the same but at the same time there are chances to be stressful in the same conditions too. Teaching puts direct impacts on the teachers' health and effectiveness, which leads to low self-efficacy of the teachers. Hence, there is connection between the stress and the self-efficacy among the teachers. The teachers' performance is targeted with the different indicators of stress. However, if there is better self-efficacy of the teachers, it will be helpful in dealing with the stressful situations. The stress is also further divided into different type's i.e. social, psychological, gender and environmental. The countries with better human development index prefer to deal with the teachers' stress and the teachers have more facilities so they do not have special kinds of stress. In

such countries, the self-efficacy helps them to overcome the minor issues related to any kind of stress (Scholz & Schwarzer, 2005).

The failure and the success of the organizations is associated with the self-efficacy. The self-efficacy always pushes the teachers to be confident and face the stress in appropriate way. It is obvious that stressful situation is a factor to halt the smooth functioning of the organization. The stress leads to indifferent and avoiding nature of the teacher, which further restricts their performance (Akgündüz, 2006). In a stressful condition, the employees cannot perform the tasks in an appropriate way. The stress includes the cognitive and physical stress, which puts restrictions on the routine duties of the teachers. A stressful teacher is unable to handle the class management and the students appropriately. It reduces the job satisfaction by putting sprints to influence the performance of the teachers. The stress also has negative impacts on the social and behavioral skills of the teachers. It prohibits them to be successful in teaching (Gümüştekin & Öztemiz, 2005).

1.5. Objectives of the Study

Following are the key objectives of the current study.

- To explain the parameters of self-efficacy
- To find out the nature and extent of stress experienced by the school teachers
- To examine the relationship between stress of the teachers and their self-efficacy

2. Methods and Materials

This chapter presents the details regarding the methods and materials applied in the current study. Research process involved the use of various methodological approaches that needed to be explained in detail. This section of the dissertation is directed towards explaining the methods and materials applied in the current study.

2.1. Research technique

The current study based on the quantitative research technique as it is directed towards finding out the relationship between teacher's stress and their self-efficacy in the job place. As the objective of the study is towards finding out the association between the studies variables hence, quantitative research technique is the most suited and best appropriate. The objective of the quantitative research technique is on quantify the study variable and find out the association among study variables which makes the researcher to opt for the quantitative research technique.

2.2. Population of the study

Population of the current study comprises of all the teachers of public sectors schools in the district Okara. There are 10244 schoolteachers in district Okara and includes ESE, EST, SST and others. Hence, this forms the population as well as the sampling frame for the current study. The above figures are not random figures rather the list have been collected from the directorate of the school education department. The study is only limited to the public sector schools of the district Okara and private schools have not been included in the population of the current study.

2.3. Sample Size

Determination of the sample size is very important part of the any research as the findings of the study are generalized to the larger population when the sample size is accurately calculated. As the population of the current study is known, hence research advisor formula was used to determine the sample size. Based on the research advisor formula to calculate the sample size the sample size for the current study is 622 teachers. This sample size is drawn based on 99% confidence interval and 5% margin of error. Hence, after applying the research advisor formula the sample size would be 622 teachers. Following is the formula that researcher used to calculate the sample size out of a population of 10244.

2.4. Sampling Technique

Sampling technique is an important step in research inquiry as the findings of the study are based on the accurate calculation of the sample size and identifying the respondents through appropriate sampling technique. Broadly, speaking the researcher applied probability-sampling technique and furthermore multistage sampling technique was applied in the current study. This sampling strategy enables the researcher to identify the respondents after passing multiple stages. Following are the stages that researcher adopted for the selection of the respondents in the current study.

- In the first stage of the sampling process researcher obtained the list of teachers from directorate of school education. This list contained the total number of teachers in the district Okara in the school education department. This list served the purpose of the sampling frame.
- In the second stage of the sampling technique researcher distributed the population into four major categories i.e. PST/ESE teachers, EST/ESE teachers, SST/SSE teachers and all the remaining categories of the teachers.
- In the third stage of the sampling technique, proportionate sampling technique was applied. The total number of respondents for each above-mentioned category was drawn by dividing the total number of population and sample size for each category. After applying the proportionate, the following schemes came out. The proportionate sample was calculated by multiplying the total number of teachers in each category to the sample size i.e. 622 and then dividing it to the total population i.e.10244.

Sr. No.	category of teacher	Enrollment	selected sample
1	PST	5907	359
2	EST	2928	178
3	SST	1256	76
4	Others	153	9

• In the fourth and last stage of the sampling technique, simple random sampling was used. The researcher used the lottery method to identify the total desired number of teachers from each category.

3. Variables Construction and their measurement

The current study is based on explanatory research design, which is based on the idea of finding out the relationship between independent and dependent variable. Hence, it is important to clearly define the variables used in the current study and how the variable have been measured. Following is the detail of how variables have been measured in the current study.

3.1. Independent variable

Teachers stress and teachers stress profile have been adjusted as the Independent variable in the current study. The researcher intended to find out how teachers stress and different predictors of stress effect the performance and self-efficacy of the teachers. However, for the measurement of the teachers stress Rosenberg, 2010 teachers stress profile was used. This profile by Rosenberg, 2010 contains following key indicators.

1. Student's behavior
2. Employee /administrator relation
3. Teacher/teachers relation
4. Parent/ teachers relations
5. Time management

3.2. Dependent variable

Teacher's self-efficacy has been treated and adjusted as the dependent variable in the current study. The researcher intended to find out how perceived stress among teachers effect their self-efficacy to perform various task. For the measurement of teacher's self-efficacy a scale developed by Tschannen-Moran, M., & Woolfolk Hoy, A. (2001) was adopted in the current study. This scale is based on 12 questions to assess the teachers self-efficacy in three major dimensions i.e. efficacy in student's engagement, efficacy in instructional strategies and efficacy in class management.

4. Analysis and Findings

This section is based on the quantitative analysis and findings of the current study. In the first place socio-demographic features are presented followed by regression analysis

4.1. Socio-Demographic Features

		Frequency	Percent	Cumulative Percent
Valid	PST	359	57.7	57.7
	EST	178	28.6	86.3
	SST	76	12.2	98.6
	All others	9	1.4	100.0
	Total	622	100.0	

The above table shows the frequency distribution of the categories of the teachers in the current study. The study shows that 359 respondents i.e. 57.7% of the teachers were PST while 178 i.e. 28.6% of the teachers were EST. the table further shows that 12.2% of the teacher belong to the category of SST and only 9 teachers i.e. mere 1.4% of the teachers belong to the category names as others. Hence, in line with the sample size and proportionate sampling technique applied the above table shows that most of the teachers belong to the PST and EST category.

		Frequency	Percent	Cumulative Percent
Valid	MA	508	81.7	81.7
	MPhil	91	14.6	96.3
	PHD	23	3.7	100.0
	Total	622	100.0	

The second important socio-demographic category of the current study is level of education of the teachers. The above table shows that vast majority of the teachers i.e. 81.7% of the teachers belong to Master level category while 14.6% i.e. 91 teachers had a qualification level of MPhil. While 23 respondents were at the level of PHD.

4.2. Regression Analysis

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.948 ^a	.898	.898	.19690	.898	1089.024	5	616	.000	1.967

a. Predictors: (Constant), Teacher/ Teacher Relations, Employee/ Administrator Relation, Parent/ Teachers Relations, Time Management, Students behavior
b. Dependent Variable: Teacher Self Efficacy

The Model Summary provides an overview of the regression model used to predict the Teacher Self Efficacy score. The R Square value of .898 indicates that 89.8% of the variation in the Teacher Self Efficacy score can be explained by the independent variables included in the model.

The Adjusted R Square value of .898 suggests that the model is a good fit, as it takes into account the number of predictors included in the model.

The Standard Error of the Estimate value of .19690 represents the average difference between the actual and predicted values of Teacher Self Efficacy.

The Change Statistics table provides information about the contribution of each predictor variable to the overall model. The F Change value of 1089.024 with a significance level of .000 indicates that the model as a whole is significant and that at least one of the predictor variables is related to the Teacher Self Efficacy score.

The Durbin-Watson statistic of 1.967 suggests that there is no significant autocorrelation in the residuals of the model, which means that the assumption of independent errors has been met.

Table 4: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.426	.081		91.880	.000		
	Students behaviour	-.402	.012	-.449	-34.756	.000	.990	1.010
	Parent/ Teachers Relations	-.397	.011	-.476	-36.956	.000	.994	1.006
	Time Management	-.383	.011	-.438	-33.957	.000	.993	1.007
	Employee/ Administrator Relation	-.395	.011	-.447	-34.664	.000	.994	1.006
	Teacher/ Teacher Relations	-.396	.011	-.452	-34.997	.000	.990	1.010

a. Dependent Variable: Teacher Self Efficacy

The Coefficients table provides information about the regression coefficients for each predictor variable included in the model.

The Unstandardized Coefficients (B) represent the slope of the regression line for each predictor variable.

The Standard Error column provides an estimate of the standard deviation of the sampling distribution of the regression coefficient.

The Standardized Coefficients (Beta) column provides an estimate of the change in the Teacher Self Efficacy score for a one-unit change in the predictor variable, standardized for each variable's variance.

The t-value column represents the ratio of the regression coefficient to its standard error, which indicates the extent to which the regression coefficient is different from zero.

The significance level column (Sig.) provides the p-value associated with each t-value, indicating whether the regression coefficient is statistically significant. In this case, all predictor variables have a p-value less than .05, indicating that they are all statistically significant.

The Collinearity Statistics table provides information about the multicollinearity between predictor variables. The Tolerance column represents the proportion of the variance in the predictor variable that is not accounted for by the other predictor variables in the model. The VIF (Variance Inflation Factor) column represents the reciprocal of the Tolerance,

which indicates how much the variance of the regression coefficient is inflated due to the multicollinearity. In this case, all variables have a Tolerance value greater than .2 and a VIF value less than 5, which indicates that there is no issue with multicollinearity in the model.

The Coefficients table shows the regression coefficients for each predictor variable included in the model, along with the intercept.

The intercept of the model is 7.426, which represents the predicted value of Teacher Self Efficacy when all of the predictor variables are zero.

The regression coefficients for the predictor variables represent the change in the Teacher Self Efficacy score for a one-unit change in each predictor variable, while holding all other variables constant.

For example, for every one-unit increase in Students Behaviour, the Teacher Self Efficacy score is expected to decrease by -.402 units, holding all other predictor variables constant. Similarly, for every one unit increase in Parent/ Teachers Relations, Time Management, Employee/ Administrator Relation, or Teacher/ Teacher Relations, the Teacher Self Efficacy score is expected to decrease by -.397, -.383, -.395, and -.396 units, respectively, holding all other predictor variables constant.

It is important to note that the regression coefficients for each predictor variable are negative, indicating that increases in these predictor variables are associated with decreases in Teacher Self Efficacy. Additionally, all of the predictor variables have a statistically significant regression coefficient with p-values less than .05. This suggests that all of the predictor variables are important in explaining variation in Teacher Self Efficacy in this model.

5. Conclusion

The first objective of the study pertains to finding out the stress faced by schoolteachers in the study area. Based on the findings of the current study it is concluded that the teachers of the school department face stress in their job place. However, the nature and extent of the stress varies with different socio-demographic features as well as category of the teaching cadres. Gender and level of education are related with the level of stress among teachers. On the same token category of teachers such as PST, SST and EST also differ regarding the stress faced by them.

The second objective of the study is designed to find out the relationship between stress and self-efficacy among teachers. Based on the findings of the study it is concluded that a negative relationship exists between stress and self-efficacy. This implies that stress among teachers reduces the self-efficacy among teachers.

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