

Interrelationship between Collective Teacher Efficacy and Job Satisfaction of Teachers at Secondary Schools

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Abstract

Present research examines the relationship between Secondary school teachers' efficacy and their job satisfaction. This is a co-relational study in which two questionnaires were used, i.e., Collective efficacy scale and Minnesota satisfaction questionnaire. Formal permission was taken before using these two questionnaires in the research study. Minnesota satisfaction questionnaire provides information about satisfaction level of teachers regarding their job while collective efficacy provides data that identifies teachers' collective efficacy. 210 public and private secondary schools were included in the study and 820 secondary school teachers took part in this research. Out of 820 questionnaires, 803 were returned making total response rate to be 97%. Parametric statistical techniques including correlation and t-test were used to analyze the data. It was found that there was strong correlation between public and private school teachers' collective efficacy. However, significant difference was observed between public and private school teachers' job satisfaction. Job satisfaction and collective efficacy level play an important role in the overall commitment and productivity of the school organization. Job satisfaction affects students' performance, and educational improvement is not possible without improving these two factors. Through theoretical underpinning, the study proves that job satisfaction and teachers' efficacy lead towards school improvement, quality education and student satisfaction which is an ultimate goal of any organization. Besides, these two variables greatly affect leadership behavior and styles. The findings of this study are helpful in preparing future school leaders effectively with leadership skills that are necessary for developing an environment for sustaining teachers' job satisfaction and collective teachers' efficacy.

Keywords: *job satisfaction, efficacy, secondary school teachers*

Introduction

In educational institutions teachers' efficacy and satisfaction both factors play a major role. Most of the researches regarding teachers' job satisfaction revolve around "overall job satisfaction" and diverse aspects which influence job satisfaction. Bolin describe seven different aspects based on principal and teachers' level of professional satisfaction (2007).

Zhongshan research study reveals the fact that teachers were quite satisfied regarding relation with their colleagues in school. Similarly, their level of satisfaction about their school principal behavior was quite high, but on some other elements like income, promotion, appreciation, etc., they were not satisfied (2000).

Teacher's job satisfaction is the most important aspect which is directly linked with "efficacy." Teachers perform certain activities for achieving their targets. Such kind of beliefs are called efficacy so we can take efficacy in terms of faith or belief that an individual has the potential to perform required actions for handling or administering a certain situation. Efficacy which is directly linked with teachers has two dimensions, named "self-efficacy and collective efficacy." Self-efficacy can be termed in such a way that it is an overall judgment about the perception regarding performance of a certain action or a task, while collective efficacy is based upon the faculty beliefs towards performing a certain task with the view that their overall efforts will be resultant in the form of positive outcome. Such kind of beliefs possessed by the teachers or the school heads contribute for setting desired targets (Hoy & Miskel, 2005, p. 150).

In 2005 Miskel highlighted this concept in a clearer and better way when by referring to mastery experience, vicarious experience, social persuasion, and emotional arousal as fundamental elements equally important for the individual as well as for understanding the concept of collective efficacy (p. 176). Within the educational organization, we can take collective teachers' efficacy as a most important property of the school because through collective efficacy lots of different phenomena which effect school activities like students achievement can be explained in a better way, yet another dimension of the school organization is relationship of head teachers and school teachers' efficacy. Besides all these, more research studies are needed for teachers' collective efficacy and how it is significant for creating positive school environment and students' academic performance in the Pakistani context.

Rational and Significance of the Study

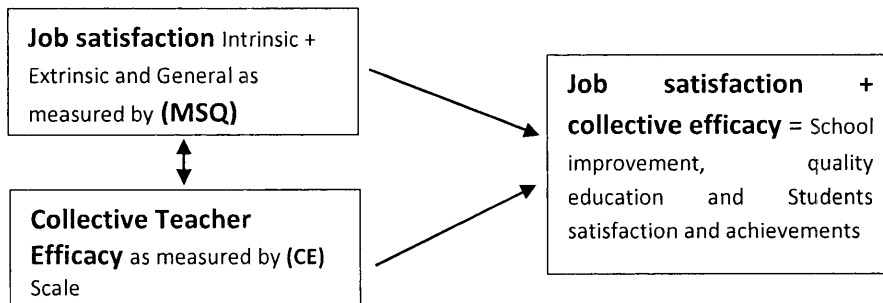
The importance of both the above mentioned elements in a school organization are well recorded. Educational organizers need to be concerned with these aspects of the educational human resource and especially of the teachers. Empirical findings about teacher efficacy and job satisfaction as well their inter-relationship are fundamental in effective school organization. The findings of this study will therefore, help

educational leaders to understand the inter-relationship of leadership behavior, collective teacher efficacy, and teachers' job satisfaction. This research aims to add some findings to the larger body of knowledge. It aims to assist educational managers, organizers, school heads, teachers, etc. in identifying strategies that help in making decisions about teachers' job satisfaction. The study is significant in recommending appropriate measures in order to further improve working environment in public and private schools in Pakistan.

Theoretical Framework

Theoretical framework helps build a theoretical base for research. The proposed research revolves around inter-relationship between collective teacher efficacy and teachers' job satisfaction required to be investigated in school conditions. Proposed studies therefore, focus on investigating the inter-relation of the collective teacher efficacy as measured by Collective Efficacy Scale (CE-Scale), and teachers' job satisfaction as measured by Minnesota Satisfaction Questionnaire (MSQ). Theoretical framework shows that job satisfaction and teacher efficacy leads toward school improvement, quality education and students' satisfaction and achievements.

Theoretical Framework Diagram



Research Method and Procedure

It was not known to what extent the correlation would be between, efficacy beliefs and teachers' satisfaction regarding their job in Pakistan. This study therefore examines the inter-relationship between the two factors, "Teachers' job satisfaction and Teachers' efficacy." The research is descriptive and quantitative. According to Creswell (2008), "mostly the quantitative research is used when asking objectives, collecting quantifiable data and analyzing data by using different statistical techniques." In this research study two questionnaires were used Minnesota Satisfaction

Questionnaire (MSQ) and Collective Efficacy (SE) scale. Proper permission was taken before using these questionnaires in this research study. Simple Random sampling technique was used. Sample size consisted of 210 Public and Private Secondary schools. 820 Secondary school teachers took part in this research. Before taking data from secondary school teachers, permission was taken from public and private school directorates. 803 out of 820 questionnaires were returned. Thus the total responses rate was found to be 97%. Parametric statistical techniques including correlation and t-test were used to analyze data.

Objectives of the Study

1. To ascertain inter-relational bond of teacher collective efficacy and job satisfaction.
2. To ascertain the difference if any in teachers' efficacy in public and private schools.
3. Exploring the difference if any in teachers' job satisfaction in public and private school.

Research Hypothesis

- Ho₁:** There is no significant relationship between collective teacher efficacy and job satisfaction of teachers as judged by all teachers.
- Ho₂:** No significant relationship exists between collective teacher efficacy and job satisfaction of teachers as judged by public school teachers.
- Ho₃:** No significant relationship exists between collective teacher efficacy and job satisfaction of teachers as assessed by private school teachers.

Research Design

The design of this research study is descriptive and non-experimental. Quantitative method was used for collection of data. According to Creswell (2003), quantitative methods are used primarily to verify or test explanations or theories, to relate variables in hypotheses or questions, and to employ statistical procedures. Two questionnaires were used to be administered to school teachers. Gall et al. (2003) contends that questionnaires are used extensively in educational research to collect data about observable phenomena. In present scenario, education in the private sector has got momentum in Pakistan right from Montessori to the University level. It has brought huge impact on the education of Pakistan in many aspects including number of educational institutions, enrolment, educational expenditures, quality of education, teachers' efficacy, job

satisfaction, etc. Such factors do carry lot of importance in the school set up and it is also very significant to study the inter relationship of these factors in comparison of public and private schools. Keeping this concept in view, the target population of this research study consisted of all public and private schools. The population included all secondary school teachers serving in Public and Private Sector.

In this research, 108 secondary schools of public sector and 102 private secondary schools were included in the study. According to L. R. Gay, 80 is the suitable sample size of 100 and 86 was appropriate from the population size of the 110 (1995, p. 125). The researcher took sample of about 210 secondary schools of both public and private sector. Simple random sampling technique was used in this study, so final sample size consisted of 820 secondary school teachers. In this research study following instruments were used

- 1) Minnesota Satisfaction Questionnaire (MSQ)
- 2) Collective Efficacy Scale (CE – Scale)

Review of Related Literature

Job Satisfaction

Job satisfaction is the most popular area of research especially in connection with the organizational related issues. Researchers divide job satisfaction on two levels, i.e., intrinsic and extrinsic satisfaction. Job satisfaction is when a person performs his/her duties or provides services in an organization and in return gets not only monetary benefits but also feeling of happiness and satisfaction. Similarly, job satisfaction is achieved when an employee wants to work in an organization willingly and happily. It is an admitted fact that education is the backbone of any country in which primary and secondary level of education plays a vital role and by improving the educational sector, economy of any nation can be improved. This is only possible if we improve the level of education in the institutions. In this connection there are many factors which affect quality of education. Of these variables, two major variables which have greater influence on the quality of education are efficacy of teachers and their level of satisfaction regarding their job. By working upon such elements education sector can be strengthened in all these schools. Trust of parents can also be gained. In addition, this would increase the desire for knowledge among learners, and attraction for and retention of qualified teachers in teaching profession. Satisfaction of teachers and their collective efficacy are such elements

which greatly affect students' motivation level and performance in their career. Different communities of any society also affect teachers' satisfaction and efficacy level by appreciating their contribution in the field of education, and ultimately all this turns in the form of educational and school improvement and such improvement leads toward students' satisfaction and their achievement which is the final and foremost goal of any educational organization/ schools. Management of any school organization which includes/involves school leaders/school principals can play a very important role in improving teachers' job satisfaction level regarding their profession.

Elements of Job Satisfaction

Various researches indicate that job satisfaction is closely related to the nature of work itself, economic benefits of work, and social relationship. Job satisfaction is based upon the following elements:

Creativity, Authority, Complexity, Pay level, Coworker satisfaction, Work load, Behavior of principal, Physical facilitation, Teaching facilitation, Activities, Achievement of Student, Clarity of concepts, Moral values, Level of accomplishment, Security, Supervision, Term & condition of job, Independence, Recognition, Social status, Rectification of complaints, Terms of condition, Ability Utilization, To look after Family, Entertainment. (Ghafur, 2011)

Teachers' Job Satisfaction

Teachers' perception about the environment in which they perform duties as a whole or as a part teacher, their attitude and response towards job is called teachers' job satisfaction (Bolin, 2007). According to Saari & Judge (2004), most important attitude of teachers is linked with job satisfaction.

Job satisfaction is a phenomenon that has been investigated since 1935. Among job satisfaction theories most cited by researchers are the need theory and two factors theory. Need theory, basically based upon job satisfaction of employees, mostly depends upon individual's needs and characteristics of the job (Bolin, 2007). Two factors theory highlights that satisfaction and dissatisfaction in job do not constitute two poles of a continuum. Basic difference exists between the two (Bolin, 2007). The work of Herzberg research finds out the difference between satisfying and dissatisfying teachers' job satisfaction factors. Satisfying factors are related with high order needs while dissatisfying with low order needs (Dihham & Sott, 1998).

According to Bogler (2001), teachers' needs have been ranked in different order ranging from high to lower order. One of the MetLife surveys of American teachers (2001) explores teachers' job satisfaction by focusing on intrinsic factors as well as extrinsic factors. Intrinsic factors include working with students, rewarding profession, feeling good about students while identified extrinsic factors of teachers' job dissatisfaction include, salary, lack of administrative support, student discipline problems, less teaching resources, and inadequate level of respect (Metropolitan life, 2001). In the field of job satisfaction so many research studies have been conducted and different factors have been examined which affect teachers' job satisfaction. Different demographic factors like gender, age, education, marital status, have been especially emphasized in many job satisfaction studies (Bolin 2007).

Perie and Baker (1997) linked teachers job satisfaction with strong positive relationship with teacher autonomy, strong leadership support, positive school environment, administrative support leadership, good students' behavior. These factors lead toward higher job satisfaction. On the contrary, salaries and benefits are weakly related with job satisfaction, too. So teachers' relationship with school principals plays an important role and is a major factor in teachers' job satisfaction and dissatisfaction. The National Education Association (NEA, 2001) reported that non cooperative administrative behavior and non-sufficient administrative support are a cause of lower level of teachers' job satisfaction. Harries Poll (2004) conducted a research the results of which reveal the fact that organizational employees' level of satisfaction has increased in the last twenty years (Taylor, 2004). The major cause of job satisfaction among teachers was a better improved relationship between principal, working condition, school environment and higher salaries (Taylor, 2004). Briefly, job is related with such elements as supervision, leader's behavior, working conditions, social relations, on job grievances, fair treatment with employer. Other than these, health, employee's age, and temperament also have a great effect on job satisfaction, liking, disliking, satisfactory, unsatisfactory, etc. It is also proven that job satisfaction and teacher's efficacy lead towards school improvement, quality education and students satisfaction which is an ultimate goal of any organization. These two factors are greatly affected by leadership behavior/ styles due to

- (a) Differences in the stimuli
- (b) Differences in the job incumbents

- (c) Intra individual sources of job satisfaction accounted for largely in terms of the concept of adaptation level of the related concept of personal values. (Remakrishnaiah & Rao, 1998)

Teachers' Motivation, Job Satisfaction and Performance

Teachers' motivation in school settings has a great importance which is always linked with the responsibility of imparting knowledge and skills to the learners. Generally, more satisfied teachers are more productive and have a great influence on students' educational achievements (Mertler, 1992). The element of motivation is such a strong factor which helps and tempt people to perform desired action for attaining certain goals for improvement, and it is a fact when teachers are motivated, their performance level rises which not only affects their teaching but also improves students understanding level and capacity of grasping the new concepts. Motivated teachers' capacity for work and performance show better result and this motivation leads teachers toward satisfaction regarding their profession. They perform their duties whole heartedly. Hoy and Miskel (2005) quote Bandura (1997) that for having an idea about teachers' efforts and teachers' perception regarding their hard struggle for improving students' academic performance can have more yielding effects, such kind of academic efforts not only improve students level of performance but also improve students' interests and ultimately lead students toward motivation and success. Such kind of academic success is not only institutional but also the indication of overall growth and progress of society. It also proves that job satisfaction and teachers' efficacy leads towards school improvement, quality education and students satisfaction which is an ultimate goal of any organization.

Importance of High Job Satisfaction

High level job satisfaction of employees play a vital role in the progress of any organization. Barnett and Miner (1992) highlighted different reasons of job satisfaction. Employees who are not happy from their job mostly suffer from mental health problems, absenteeism, and turnover. Mostly dissatisfied employees let go their job or are likely to be disinterested in work. Too much absenteeism of employees is an alarming and costly for any organization. Thus a strong relationship between dissatisfaction and absence can be a strong reason for concern about employee job satisfaction.

Similarly, Stephen P. Robbins (1998) states that importance of job satisfaction is necessary and managers are concerned with the employees' job satisfaction on the bases of four reasons:

1. Dissatisfied employees mostly leave the job or skip the work.
2. Dissatisfaction causes destructive behavior among the employees.
3. Satisfied employers have mostly good health and live longer.
4. Job satisfaction always affects employee's life positively other than the job.

Teachers' Collective and Self Efficacy

Concept of teachers' efficacy is not new and researchers are working on this concept for 20 years. During this time period lot of research on teachers' efficacy has been conducted and different definitions of teacher-efficacy came forth. Among these, the simplest and the most popular one is given by Barfield and Burlingame. They defined efficacy as a "personal characteristic that enables an individual effectively deal with the world" (1974). Bandura (1986) referred to people's perceptions of the group's efficacy to effect change.

Basically the issue of how to converge diverse definitions is resolved by the Social Cognitive Theory of Bandura which describes that teachers' efficacy is based upon two factors, i.e., outcome expectations and efficacy expectations. Demo (1985) introduced a scale for measuring teacher efficacy factor analysis and made a model that was called the two-factor model.

Teachers' efficacy is further divided into two categories, Collective-efficacy and self- efficacy. "Collective efficacy is a belief or perception that is shared by members" (Zacarro, Blair, Peterson & Gilbert, 1992). "Self-efficacy is a personal belief about teachers' beliefs to help students in learning" (Ashton & Webb, 1986).

Factors Influencing Self-Efficacy in Education

Following factors affect self-efficacy:

1. Targets /Goal Setting
2. Information Processing
3. Feed Back
4. Rewards

Teachers' Self Efficacy

Webb suggested teachers' efficacy as a basis for a theory based on teachers' efforts affects activities in such a way that students can understand in a better way. With high self-efficacy, teachers must develop creative and challenging activities which may help students moving toward

success. Such kind of efforts which motivate students can enhance student's capabilities and learning interest. In correlation researches, teachers have a positive classroom environment, have high self-efficacy, Boosting students and paying full attention on learners/pupils studies was positively associated with high teaching self-efficacy through checking student's progress in learning as well as their language and mathematical skills improved Wool folk pupil control ideology and motivational style two dimensions of self-efficacy differentiated each other, student's performance, motivation and efforts can be increased measure where teachers felt that their efforts can affect positively on unmotivated students. This factor cannot be denied in every sector of life and it is an admitted fact that efficacy of school employees not only affects the overall performance of the institution but also educational institution flourishes day and night. It is also proven that job satisfaction and teacher's efficacy leads towards school improvement, quality education and students satisfaction which is an ultimate goal of any organization and these two factors greatly affected by leadership behavior/styles.

Collective Efficacy Beliefs and Students Achievements

In East Asia mostly teachers, leaders, parents, and administrators have different views regarding success and factors which lead to it in students. Parents and teachers mostly agree that academic achievement is the basic and foremost goal for children. Therefore, they collectively work for attaining such goal. It is a fact that the institutional structure, administration and curricula of the American public school share greater similarity with Asian American schools (Farkas et al., 1990). Researchers reveal the fact that Asian American parents and students hold compatible high performance success in life toward educational performance, emphasize effort as a key to success, and have high performance expectations (Mizokawa & Ryckman, 1990). Schneider & Lee (1990), Slaughter et al. (1990), Yao (1985) believe high academic expectations provide basic ingredients which become the source of promoting high level achievements. This also proves that job satisfaction and teachers' efficacy lead towards school improvement, quality education and students' satisfaction which is an ultimate goal of any organization. And these factors are greatly affected by leadership behavior/styles.

Results

For finding a relationship and exploring difference between variables different statistical techniques and tests including Pearson Product Moment, t-test, and regression analysis were used. These were used for

testing correlation between different variables. As far as determining difference of score in various variables is concerned, t-test is one of the best test techniques which is mostly used. In the present study t-test has been used for testing null hypotheses H_0 1 to 3.

H_{01} : There is no significant relationship between collective teacher efficacy and job satisfaction of teachers as judged by all teachers.

Table 1. Correlation between collective teacher efficacy and job satisfaction among serving secondary school teachers (N=803)

Variable	Mean	SD	R	P
Job satisfaction as judged by serving teachers themselves	60.29	11.45	.403	.000
Efficacy score as judged by serving teachers themselves	84.24	11.21		

The above table shows relationship between collective teacher efficacy and satisfaction about job of serving teachers as judged by teachers themselves. The analysis shows positive correlation coefficient (.403) as the value among different variables is (.000) which is less than alpha (.001). Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. In this table the mean (SD) for teachers' job satisfaction is 60.29 (11.45) and efficacy mean score is 84.24 SD (11.21).

H_{02} : No significant relationship exists between collective teacher efficacy and job satisfaction of teachers as judged by public school teachers.

Table 2: Exploring correlational bond between collective teacher efficacy and job satisfaction of public school teachers as assessed by public secondary school teachers (N=429)

Variable	Mean	SD	R	p
Public school teachers' job satisfaction score	62.86	11.40	.422	.000

Public school teachers' efficacy score	84.42	11.15
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The above table shows linear relationship between the two variables as assessed by public school teachers. The data analysis results show that the p value .000 is less than alpha (.001). So the above stated hypothesis shows no relationship and alternative hypothesis is accepted. In this table teachers' job satisfaction mean score is 62.86 (11.40) and efficacy mean score is 84.42 (11.15).

Ho₃: No significant relationship exists between collective teacher efficacy and job satisfaction of teachers as assessed by private school teachers.

Table 3. Exploring correlation between collective teacher efficacy and job satisfaction of teachers as assessed by private secondary school teachers (n=374).

Variable	Mean	SD	R	p
Private school teachers' job satisfaction score	57.34	10.78		
Private school teachers' efficacy score	84.02	11.29	.398	.000

P<.001

The above table shows linear relationship between the two different variables of teachers as assessed by private secondary school teachers. The analysis indicates statistically significant correlation between the variables. P value (.000) is less than (.001), so the null hypothesis is rejected and alternative hypothesis is accepted. In the above table private teachers' job satisfaction mean score is 57.34 with SD (10.78) and efficacy mean score is 84.02 with SD (11.29).

Major Findings

Findings of the research study serve and fulfill the purposes of broader level explanatory and descriptive requirements. After completion of data analysis and interpretations, some of the major findings which were drawn from this research study are given below:

1. The correlation between collective teachers' efficacy and job satisfaction score as assessed by teachers showed a positive correlation as the correlation coefficient value r (.403). The p value (.000) is less than alpha (.001), so the null hypothesis (H_{01}) stating non-significant relationship was rejected (Objective 1) (Table 1).
2. The correlation between both school system teachers' collective efficacy and job satisfaction as assessed by public and private school teachers showed a positive correlation coefficient valuing public school teacher (.422) p (.000) and private school teacher (.398) p value (.000) is less than alpha (.001) which showed a significant correlation between the variables. Two null hypotheses (H_{02} and H_{03}) stating non-significant relationship between the variables were rejected and alternative hypotheses accepted. The result showed that public and private teachers have strong correlation between the variables of job satisfaction and collective teachers' efficacy (Objective 2, 3) (Table 2, 3).

Conclusion/Discussion

In addition, strong positive correlation existed between females who were quite satisfied with their jobs and were also satisfied with their leadership behavior. After analyzing the data it was concluded that a positive correlation existed between collective teachers' efficacy and job satisfaction. This implies that greater job satisfaction leads to greater collective efficacy. Similarly, strong correlation existed between public and private school teachers' collective efficacy and job satisfaction. So, it can be safely concluded that job satisfaction and teachers' efficacy lead towards school improvement, quality education and students' satisfaction which is an ultimate goal of any educational organization.

The present research study explores the relationship between two different but very important variables. It was observed that there was statistically significant positive correlation between both the variables. This research study results support the previous researches which were conducted in this field. Parkinson (2008), Bare-Oldham (1999), Benit (1991), and Eldred (2010) research studies showed a significant correlation between teachers' job satisfaction and teachers' efficacy.

The results of this study also support research studies by Smith (1999), Rees and Reiger (1993). Smith's (1969) studies revealed the fact that significant level of difference was observed between the two genders and also in their level of perception about teachers' job satisfaction and efficacy beliefs. Collective efficacy significantly relates with teacher behavior and

student achievements. Lonita, Tabbodi and Prahallada (2009), research studies support this conclusion as well.

Recommendations

1. Directorates of public and private schools should collaborate with the universities for introducing new courses on leadership which focus on effective leadership styles and which help school Principals in increasing teacher job satisfaction and teacher efficacy, in different environments of educational institutions.
2. Teachers' efficacy and job satisfaction are generally associated with the organizational dynamics, more likely be linked with professional learning but other than this, communities can also play a vital role in improving and shaping school teachers' efficacy beliefs.
3. Better understanding between the school teachers and school heads regarding teachers' job can be more helpful in shaping and implementing strategies for retaining qualified and experienced teachers in teaching profession.
4. Findings and conclusion of the study suggest important practical implications for school heads thereby creating a learning environment in educational institutions, coping with new educational challenges. It is necessary that role of school leaders in Pakistan may be re-examined for shared vision of student success and school development as school heads may impact the efficacy beliefs of their teachers in considerable manner.

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