

A Study on Teachers' Sense of Self-Efficacy in Defence Authority Educational Institutions, Karachi, Pakistan

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Abstract

The purpose of this study was to investigate the extent to which teacher efficacy is understood by the Defence Authority Institution's teachers and the extent teacher efficacy behaviors were practiced in the Defence Authority Institutions. A survey research design was chosen for this quantitative study, which focuses on teachers' perceptions about teacher efficacy in Defence Authority Institutions schools. Data was collected through the Teacher Sense of Efficacy Scale (TSES) which is a 24-item measure of three subscales: Efficacy in Student Engagement, Instructional Strategies, and Classroom Management developed by Tschannen-Moran and Hoy (2001), and it is also called the Ohio State Teacher Efficacy Scale (OSTES). This scale was used to collect data from the teachers of Defence Authority Institutions schools to examine their perceptions about teacher efficacy. Data were collected from 393 Defence Authority Institution's teachers. The survey consisted of two sections. Part 1 requested demographic data and Part 2 contained 24 items of the TSES (Long Form instrument). Eight findings emerged after analyzing the data. These findings indicated that the teachers had a strong understanding of teacher efficacy and practiced teacher efficacy behaviors associated with improving the teaching and learning process. However, the findings also illustrated that the Defence Authority Institutions needed to include teacher efficacy as part of a sustained professional development program. Recommendations were provided to facilitate the improvement and strengthening of teacher efficacy across the Defence Authority Institutions of Pakistan.

Keywords: Teachers Efficacy; Effectiveness; Self-Efficacy; Teaching Experience.

JEL Classification: I-21; I24

INTRODUCTION

Education is an imperative human activity that helps people in transforming into more civilized, more social, more beneficial and effective members of any society and the key player of this activity is a "Teacher" (Zimmerman & Dibenedetto, 2008). The foremost responsibility of a teacher is to deliver fruitful knowledge to the future generation systematically and scientifically because the mastery of a subject by a teacher is reflected in the performance of the students. The teachers are the facilitators whose impact can be seen directly on the students' concepts, knowledge and the subject content that is learned. However, Olarewaju (1986) was of the opinion that the professionalism in teaching, the necessity of required skills and efficacy sense in teachers are often considered major factors for effective learning. Ngada (2009) emphasized that the educational programme's success or

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failure is dependent on adequate or inadequate availability of qualified, competent, experienced and dedicated teachers.

Adesina et al. (2016) examined the teachers' Attitude, Years of Teaching Experience and Self-Efficacy as Determinants of Teachers' Productivity in Teachers' Professional Development Programme in Ibadan Metropolis, Oyo State, Nigeria. The result indicated that 30% of the respondents have a negative attitude towards teaching having experience 1-5 years, whereas 70% of teachers have a positive attitude towards teaching with experience of teaching 6-11 years and above. Positive predictors of teachers' attitudes express self-efficacy on their productivity. The study concluded that the teachers with self-efficacy are prone to better teaching professional productivity while those with low self-efficacy are likely to have weak teaching productivity.

The influence of teacher characteristics such as gender, educational qualifications and teaching experience has been examined as the major factors affecting students' achievements by different researchers (Rivkin et al., 2005). However, these specific teacher factors that influence students' academic achievement has never been on consensus. Teachers' professional qualifications and experience are always regarded as an added feather in their cap, which provides a guideline to them in their teaching practices. However, their sense of self-efficacy and professionalism play an inevitable role.

Teaching is a skill like any other skill; it can be acquired and refined with the help of methods and teaching techniques peculiar to it. There is a general perception or that good and efficacious teacher can never be made", the modern world disagrees. What is required to acquire it, is nothing but sheer effort, time, and organization. It has also been likewise noted that teachers' own educational background, as well as their professional qualification, is usually given due importance while hiring teachers (Lyon et al., 2016). However, Seweje and Jegede (2005) noticed that the ability of a teacher to teach is not acquired solely from one's academic background, but it is based upon the teachers' sense of efficacy along with the effective teaching skill acquired. There has been a lot of debate and research going on teachers' essential teaching skills and researchers are greatly involved with how different teaching methodologies and behavior of a teacher in the classroom can influence a child's learning and achievements (Lyon et al., 2016).

Still, factors that might affect and impact teaching practices or methods and teachers' conduct and demeanor have gained not so much attention in this regard. Assembling or collecting essential details on preliminary (previous or preceding) elements that enhance or upgrade teaching may be able to supply and furnish beneficial or effective information for increasing teaching productiveness and validity besides students' performance and accomplishments (Sanga et al., 2016). Among many factors that might have an effect on teachers' performance in the classroom are teachers' efficacy, teachers' competence, expertise and professionalism. According to Ker (2016), teacher efficacy is the ability possessed by teachers, used to produce the desired results.

A lot depends upon how a teacher constructs designs and conducts a lesson" and "the way it is delivered in the classroom". What teachers believe or think about their effective teaching skills which they possess or their expertise in imparting quality, knowledge and efficiency, thus has been clearly stated in teacher's feedback for students. Indeed, a teacher's effectiveness in the classroom situation is much dependent on how well he/she can modify and adapt their actions in the light of

how well the lesson is absorbed and understood by pupils. This differs from teacher to teacher and it is also reflected in the teachers' management of self-discipline and familiarization and adapting to new teaching techniques (Woolfolk & Hoy, 1990).

To sum up the point it can be rightly said that "Teaching" requires sheer hard work, commitment, self-grooming and self-discipline. It is regarded as an intricate exacting, demanding and challenging job. The art of teaching requires a high degree of flexibility, adaptability and nimbleness of mind that goes far beyond the mechanical application of step-by-step procedures. Summers et al. (2017) investigated the effects of teachers' efficacy beliefs on students' perceptions of teacher relationship quality. The results indicated that teachers who were reported with higher personnel efficacy at the beginning of the year tended to have students with decreased dependency and increased learning outcomes. It was suggested that having a strong sense of efficacy has enhanced students' performance over time which likely increased their sense of engagement in the classroom and enhanced their learning outcomes.

It is very important to know the difference between effectiveness and efficacy in education. The term "Effectiveness in teaching" refers to the apparent, visible and observable actions and teaching methods that lead to achieving desired goals and results. It forms a bridge between the production of desired goals and the production of that capability and efficiency in obtaining these desired goals. The more balanced they are, the more chances there are attaining one's desired goals. Educationists and researchers have determined a strong connection and link between efficacy and effective behavior (Sehgal et al., 2017). Teacher professionalism, and productiveness in achieving desired goals by making students competent enough to think, write and speak independently, largely depend upon the right kind of teaching practices adopted by teachers in the classrooms.

Self-efficacy is the self-competence that helps teachers in self-assessment of their capabilities and strengths to organize, construct, design and implement teaching methodologies or line of actions required by them to produce the desired results or accomplishment (Bandura, 1993). It is the individual's belief in his/her potency and vigor to impact or transform the desired result, or, his or her productiveness, and efficaciousness when performing a certain duty or fulfilling a specific task or during multiple tasks in a specific field (Bandura, 1977). Efficacy is used in many countries across the globe and practiced in almost all vocations or professions to gauge and appraise individual performance and achievement (Lyons & Murphy, 1994). Efficacy is also used in schools and educational institutions to motivate stimulate and trigger the students' achievements (Howard & Hammond, 1985).

Teacher efficacy or productivity is an intrinsic and fundamental fact. It has been proven by research and seconded by theory as well that highly proficient teachers manifest effectual qualities and attributes that result in high students' achievements and their students would achieve their goals successfully. They would accomplish great success in academics as compared to those teachers who represent low efficacy caliber and standard (Viel-Ruma, et al., 2010). According to Guskey (2002), students' poor performance is basically due to lack of involvement of the students in the teaching-learning process, especially at the stage when their concepts are being developed and the non-availability of qualified and experienced teachers in teaching. The impact of the teachers on the performance of the students is very vital.

The main purpose of their research is to investigate and explore what level of teacher efficacy is understood by the DA institutions and their teaching faculty and to what amount or degree teacher efficacy behavior is practiced in these institutions. While observing the effectiveness of the teaching faculty of DA Institutions the question arises that how far have Defence Authority Institutions been able to improve their teachers' sense of self-efficacy? How much contribution by its teaching faculty has been able to make in order to achieve their respective targets in terms of attaining students' achievements as their ultimate goal? Has the organization been able to meet the targets set for their teachers which ultimately put an impact on the educational community in the society?

Whether the practices which are being followed in DA Institutions fulfilling the criteria on which teachers' sense of self-efficacy is based? Previous research has proved this fact that highly efficacious teachers produce highly efficacious students who produce better academic results and enhance their academic performance by achieving their targets (Bandura, 1977). The findings from this study examine and scrutinize the understanding and insight of DA teaching faculty regarding their impression and awareness of the term teacher efficacy are also to what extent or measure do they impart and practice teacher efficacy attitude during a teaching in the classroom.

The research also provides penetration and awareness to grasp DA teacher beliefs about how teaching in DA institutions affects their efficacy and teaching practical skills. Understanding the importance of teacher efficacy its proper utilization in the classroom and teachers' faith and conviction in teacher efficacy can surely help teachers improve their teaching skills and in bringing better learning outcomes and these can leave a lasting impact upon the overall performance of learners.

Research Question

The major research question which helped in understanding the perspective of DA teachers regarding teacher efficacy was: To what extent does the teaching faculty of DA institutions understand and practice the construct of Teacher Sense of Self Efficacy?

LITERATURE REVIEW

Recently a phenomenal change is witnessed in the field of education due to serious and considerable stress and attention paid to students outshining on national and provincial performance-based assessment and evaluations. For students learning and progress, both the teaching and the learning process serve as the founding stone of the national education system and this system calls for relentless improvement year after year for the smooth educational transaction and student academic achievement, performance and progress. In this process, the teachers need to remain involved and interested in creating students' participation and engagement in academic attainments, and accomplishments (Linnenbrink & Pintrich, 2003).

To pave the way for bringing improvement in the teaching-learning process, Collier (2005) stated that teacher's competence and effectiveness has been regarded and acknowledged as the most vital educational doctrine or tenet in terms of effectiveness and impact on the behavior of teachers and consequently its influence and impact upon students' performance and progress. No one can deny the fact that teachers who believe that they have the potential and capability to motivate students and increase their learning have more success in creating constructive and positive students' results as

compared to those who do not have any conviction in their ability to improve learning academic progress and success of their students (Ross, 1994).

The belief that human beings are the maker of their destiny and govern their destiny as it suits them has already been discussed, argued, and stated by countless researchers over the past many centuries the theory of social learning emphasized the fact that intrinsic and extrinsic motivation of any individual is always extracted or stemmed by the strong and positive encouragement in or support provided to him rather than by negative promoting or provocation (Rotter, 1966). This theory further propagates that the human psyche and character is built on the environment, he lives in (Wallston et al., 1987).

According to this theory put forward by Julian B. Rotter human personality evolves when he interacts with other human beings and the environment, he lives as both are interlinked and interconnected and both have an impact upon human character (Rotter, 1966). The gist of Rotter's theory propagates that the belief that man harbors in his mind regarding his or her destiny is the crux of the social learning theory. The author propagated that human life is controlled by either internal or external locus of control regarding their convictions and faith in their destiny. Those who have full conviction in internal locus of control believe and consider that they are the makers of their destiny and they govern the events and incidents that happen in their life. Whereas others put their belief in external forces and they have nothing to do in shaping up their own destiny (Rotter, 1966).

Bandura (1993) explained that self-efficacy reflects the individual's perspective regarding his or her ability to plan, organize and execute the required line of actions to achieve the targets set for that purpose. It is a belief in one's own self and one's own capabilities in drawing out the best from learners despite the barriers or opposition, whether internal or external comes in his or her way (Cleary et al., 2006). Bandura (1977) argues that self-efficacy is a powerful indicator of human behavior and people with the power of self-efficacy try to avoid challenging tasks that come their way, but those who possess a higher level of self-efficacy welcome any challenging task that comes their way as they have a firm belief in their own strength and capabilities that give them an edge over others and such people emerge as more successful than others.

The social cognitive theory is based on teachers self-efficacy, it manifests and testifies that low and highly productive teachers have an impact on the teaching-learning process, the teachers with low efficacy often fail to cope with difficulties faced in classrooms and give up, on the contrary to that teacher who possess high efficacy proved to be highly competent, as the cognitive theory believes on one's own judgment or conviction to produce the desired outcomes. The increased level of self-efficacy is often associated with highly constructive and innovative instructional methods and techniques and higher expectations from students (Cho & Shim, 2013; Wolters & Daughtery, 2007).

Despite all hardships, conflicts and setbacks, people have succeeded in life by defeating unachievable tasks since time immemorial and the man himself is witness to all such achievements which were but the outcome of sheer hard work against all odds. To support this statement, the example of many successful people can be quoted who achieved success despite all setbacks, discouragements and handicaps faced by them in real life. For example, the famous actor Sidney Poitier was discouraged after his first audition by telling him on his face to become a dishwasher

instead of perusing the line of acting. But his firm belief in himself and his conviction in his capabilities paved way for him to win an Oscar and bring fame and glory to the film industry.

The famous artist Vincent Van Gogh, who often went without food to complete his painting, could only sell one painting during his lifetime, but he never gave in. His 800 known pieces of art are now trimming millions as recognition of his untiring efforts and determination to gain mastery in his field. One more example is worth quoting where people witnessed Oprah Winfrey having a very traumatic and cruel childhood and having countless setbacks, blows and misfortunes in her careers, emerged as one of the richest and most well-known women in the world, who was once declared as the most “unsuitable lady” for televisions (Billings, 2012). Besides these, many other examples can be quoted to support self-efficacy being the most vital factor in bringing success in one’s life.

Since Bandura’s (1977) superfluity of research, an incomparable study on Self-Efficacy and hypothetical research-based literature has substantiated the power of self-efficacy beliefs. Bandura’s and Rotter’s theories are the two outstanding, unrivaled strengths of research from which drawn and extracted. Another theory of Efficacy of teachers.

Teacher’s efficacy is a conviction or belief that his own potential and capabilities will help in bringing out constructive and beneficial changes and desired results of students’ involvement and learning even among students who are labeled as slow learners or who may be difficult to handle during teaching due to their lack of motivation (Tschannen-Moran et al., 1998; Wolters & Daughterty, 2007). Tschannan-Moran et al. (1998) stated that it was periodical in nature which in the long run establishes a comparatively long-lasting and permanent set of teacher efficacy beliefs that has strengthened and improved the process of teaching-learning.

The teacher efficacy framework lies are two independent and different components, “general teaching efficacy” and “personal teaching efficacy” (Hoy & Woolfolk, 1993). General teaching efficacy (GTE) refers to the general belief and confidence one has in his or her teaching skills and abilities to provide standard instructions for all sorts of students including the most difficult ones (Cerit, 2010). Nir and Kranot (2006) stated that general reaching efficacy refers to the teacher’s conviction in making a difference by reaching out to those students as well who are trapped in negative external influences, and despite all these external factors can achieve success. Bandura (1977) considers and calls this outcome as a teacher’s belief in his or her ability that paves way for success and exerts an effective influence in bringing out actual success (Weasmer & Woods, 1998).

High GTE belief stresses that teachers believe in student learning skills despite negative external circumstances and environment (Tschannen-Moran et al., 1998). For example, Nir and Kranot (2006) suggested that teachers to conduct repeated lesions to the students in rural areas have confidence and believe that the same students can achieve success in the same way if they are offered new programs of Reading. As teachers show excitement and enthusiasm about these new programmes and thus the annual examination results show remarkable achievements in students’ reading performance. On the other hand, the teachers who accept that students are not capable of learning anything new, or not able to produce the desired results irrespective of positive efforts invested by schools in them to improve the teaching-learning process the result will not be produced due to the belief and demonstration of low general teacher efficacy (Nir & Kranot, 2006).

“General teaching efficacy” (GTE) talks about a general belief and confidence that teachers have in their teaching ability despite negative external factors, whereas “personal teaching efficacy” talks about teachers’ “conviction and belief in their own personal proficiency skills, competence and potentialities that are highly required and impact teaching-learning process in a constructive as well as a productive way.

This belief is further strengthened by emphasizing the fact that PTE is a belief in one’s own teaching skills which is content and result oriented (Weasmer & Woods, 1998). For instance, if the history or science teacher adopts such teaching techniques and methodologies that reflect the teacher’s in-depth knowledge of his or her subject coupled with motivation and interest aroused in students, will surely result in students’ engagement in learning. Bandura (1977) would ascribe this level of competence and proficiency as the product of that teacher’s personal belief or conviction in high self-efficacy. On the contrary, a math teacher demonstrates low PTE when he or she fails to engage a bunch of students coming from different family backgrounds on the basis of his or her belief that slow learners or low achievers will not be able to learn rigorous math concepts and thus fail to deliver effectively which results in poor teacher performance and poor success outcomes (Weasmer & Woods, 1998).

Earlier teacher efficacy study and analysis guided Woolfolk and Hoy (1990) to state that teacher efficacious performance was one of the factors which were constantly and incessantly connected with the improvement and enhancement of the teaching-learning process. The succeeding research and study strengthen and fortify the significance and relevance of teacher efficacy. The teachers who have witnessed and experienced a perpetual increase in student performance and constant rise in constructive learning connect all these productive success outcomes with their belief in teacher efficacy. Such teachers have strong convictions in their productiveness and proficiency as they firmly claim and believe that they are capable of bringing about student learning in the most effective way (Ross, 1994). When teachers firmly believe that all sorts of students can learn, then such teachers adopt and practice a variety of instructional styles and methods which are most appropriate and suitable for different environments and which have the capacity to involve and motivate students to learn and be successful (Bryant & Yan, 2010). Besides, teachers that are fully convinced of the fact that all children can be taught as they are capable of absorbing and learning, then they plan and devise methods that will set high academic expectations for their learners. Such teachers surely possess a high level of teacher efficacy beliefs and resultantly, the success rate of their students goes up despite cultural and socioeconomic differences among them.

Cooper (1979) claimed that teachers’ high academic expectations serve as a sense of achievement and self-fulfilling prognosis in the classroom situation over a period of time. This theory is supported by Rubie-Davies et al. (2006). In the research conducted in New Zealand, Rubie-Davis et al. (2006) compared teachers’ judgments and beliefs on reading performances of the actual student attainment with the Maori, Pacific Island, Asian and European students. In that study, it was discovered that teachers’ expectations were remarkably higher for racial and cultural students other than the Maori. As a result, the Maori students, whose performance and accomplishments were as good as their other classmates in the beginning dropped sharply at the end of the academic session. The analysts realized that this poor performance and interest shown by the Maori students was

preferable to their teacher's low level of expectations for this specific group of students. To sum up this research, it can be rightly said that teachers with low efficacy beliefs definitely leave a negative impact on their students' learning and success.

Out of the whole lot, teachers, particularly are the most important people in the school who can undeniably generate positive learning in the classrooms with effective communication and dissemination of knowledge coupled with a sense of hope, encouragement for all those who have learned setbacks (Rimm-Kaufman & Sawyer, 2004). This belief is the most pivotal aspect of teacher efficacy and an essential and fundamental factor that helps raise student success outcomes.

Many studies and researches have proved a strong link between teacher efficacy and the teaching-learning process, besides theoretical literature, including Barkley (2006), Davies (2004), and Henson et al. (2001). Their research, in particular, exhibited and displayed that teacher efficacy was assuredly strongly connected and linked with the all-around grooming and comprehensive learning and achievement of students. As reviewed in the previous chapter, teacher efficacy has a beneficial and productive impact in bridging up shortcomings and achievement gaps (Hines & Kritsonis, 2010), and is strongly linked with teachers' performances, behavior and attitudes, which brings improvements in the students' performance (Ashton & Webb, 1986) and is also noted for bringing improvement in learning for students with learning disabilities (Brady & Woolfson, 2008).

The success of a student depends on a teacher's effectiveness in the classroom or his/her ability to teach all pupils efficiently. Regardless of the situation or background a student belongs to, it is the behavior of a highly efficacious teacher that promotes student learning. When teachers have a high level of efficacy, then it is confirmed through empirical studies and theoretical literature that their students trust the teacher's belief systems that produce positive outcomes with greater surety (Caprara et al., 2006). For instance, it was also previously explained how Webb and Ashton (1987) demonstrated that the more efficacious the teacher, the more student learning outcome will be produced. Similar to this was the research by Moore and Esselman (1992) who discovered the relationship of teacher efficacy with student learning outcomes and thus concluded that both of them were in direct proportion with each other. Particularly the achievement in Math reflected higher levels of students of efficacious teachers than low efficacious teachers. Ross (1992) reported that the student's mastery of cognitive and affective goals is enhanced due to the work of highly efficacious teachers.

Ker (2016) explored the impacts of a student, teacher-and school-level factors on mathematics achievement which was an exploratory comparative investigation of Singaporean students and the USA students. The strongest positive relationship was found between high positive expectations of teachers on students' achievements. The USA teachers create collaborative classrooms, engage students more in academic activities by using modern instructional strategies. It was concluded that Singaporean students showed a high motivation level than their East Asian peers. Cultural differences may cause multiple interpretations of students' achievements due to teacher effectiveness. It was important to optimize the international standards of teachers with respect to their effectiveness and efficacy.

Teachers find it challenging to give students an environment that is conducive to effective learning and is surely not a task quite easy to be accomplished. In relation to this, researchers proved

with their classroom studies that classroom management reflects a teacher's ability to command and appropriate instructions to students that keep them engaged with improved learning outcomes (Brophy, 1988). The same study has been seconded by Ashton and Webb (1986) that a teacher's ability to supervise a classroom is directly proportional to a teacher's efficacy. Students and teachers promptly work on assigned tasks when the instructor with high-level efficacy displays good management skills (Hines & Kritsonis, 2010). In the course of recent decades, educator efficacy has gotten extensive consideration as a significant build in the instruction domain. Quite much can be composed about the different parts of educator efficacy and its effect on both instructors' expert improvement and student learning results.

METHODOLOGY

The aim of this study was to investigate the Teachers' sense of self-efficacy of Defence Authority Institutions and to what extent it has been understood and practiced in the Defence Authority Institutions by the teachers. The researcher collects data through questionnaires from the research participants. Likert scales are usually used to develop a way of understanding and give respondents choices with degrees of intensity. Thus, the survey research design is put into practice in numerous studies and is suitable for the present study. The population which was targeted in this study was all the teachers of Defence Authority Institutions, Pakistan. But, the population which was accessible was all teachers of Defence Authority Institutions, Karachi.

A random sample of 393 teachers was selected to participate in the study. This sample size was chosen based upon the number of teachers in the Defence Authority Institutions schools in Karachi. The Defence Authority directorate of education provided the researcher with a list of teachers in the Defence Authority Institutions' schools. The instrument which was used in this study survey was (TSES) the Teacher's Sense of Efficacy Scale which was developed by Tschannen-Moran and Hoy (2001) is a 24-item measure. This scale has three dimensions: i) instructional strategies, ii) classroom management and iii) student engagement.

Instructional strategies items' example is "To what extent can you craft good questions for your students?" The classroom management item is "How much can you do to control disruptive behavior in the classroom?" and the last student engagement item example is "How much can you do to motivate students who show low interest in schoolwork?" This instrument contains a 9-point scale to indicate the degree to which teachers felt that they could complete the indicated task (1 = nothing, 3 = very little, 5 = some influence, 7 = quite a bit, and 9 = a great deal). The researcher revised to 5-point Likert range in this study, from 1 = not at all to 5 = a great deal, with higher scores on this scale equated with greater efficacy beliefs to 9-point continuum which was in the original version of TSES.

Originally, the Teachers' Sense of Efficacy Scale (TSES) had two versions, a long-form having 24 items, with 8 items for each of three subscales and the reliability of the 24-item scale was 0.94. Teachers' Sense of Efficacy Scale (TSES) short form having 12 items, with 4 items for each of three subscales and the reliability for the 12-item scale was 0.90. For the long-form of Teachers' Sense of Efficacy Scale (TSES), the reliabilities of subscales were 0.87 for students' engagement, 0.91 for instructional strategies, whereas, for the classroom management the value of reliability is 0.90. Intercorrelations between Teachers' Sense of Efficacy Scale (TSES) subscales of instruction was 0.60,

management was 0.70, and engagement was 0.58, respectively ($p < 0.01$). As per Tschannen-Moran and Hoy (2001) suggestion, both the 24- and 12-item scales could be used however researcher considered a 24-item long form of TSES to measure the underlying construct of teacher efficacy in this study. The researcher computed un-weighted means of Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management subscale scores to determine each factor.

RESULTS

Teachers' perceptions about TSSE in Defence Authority Institutions Karachi were examined in this research study. The object was to develop a comprehension of the instructors' feeling of self-adequacy in DA institutions. Quantitative data were obtained by using a survey method research design. The data was collected through a survey instrument, TSES (Teacher Sense of Self Efficacy). The data from 393 teachers of DA Institutions in Karachi, Pakistan was gathered through the TSES.

Table 1: *Descriptive Statistics for 1st Factor of Teachers' Sense of Efficacy*

Teachers' Sense of Efficacy Scale		N	M	SD
Items.	Efficacy in Student Engagement	Teachers Responses		
TS1.	How much can you do to get through to the most difficult students?	393	4.15	.919
TS2.	How much can you do to help your students think critically?	393	3.97	.846
TS4.	How much can you do to motivate students who show low interest in school work?	393	4.37	.782
TS6.	How much can you do to get students to believe they can do well in schoolwork?	393	4.34	.774
TS9.	How much can you do to help your student's value learning?	393	4.35	.720
TS12.	How much can you do to foster student creativity?	393	4.01	.819
TS14.	How much can you do to improve the understanding of a student who is failing?	393	4.22	.815
TS22.	How much can you assist families in helping their children do well in school?	393	4.14	.939

Scale: **Efficacy in Student Engagement**

Table 1 provides the means and standard deviations of the 1st Factor of Teachers' Sense of Efficacy Scale, "Student Engagement's efficacy" with its association with eight practices. In the teacher's view, for each of the eight associated practices, the subjects were "frequently" engaged for the practices of "Student Engagement's efficacy" except the practice, how much can you do to help your students think critically? ($M = 3.97$, $SD = 0.846$). The highest mean out of the eight associated practices was how much can you do to motivate students who show low interest in school work? ($M = 4.37$, $SD = 0.782$).

Table 2: *Descriptive Statistics for 2nd Factor of Teachers' Sense of Efficacy*

Teachers' Sense of Efficacy Scale		N	M	SD
Items.	Instructional Strategies' Efficacy	Teachers Responses		
TS7.	How well can you respond to difficult questions from your students?	393	4.33	.813

TS10.	How much can you gauge student comprehension of what you have taught?	393	4.09	.782
TS11.	To what extent can you craft good questions for your students?	393	4.08	.781
TS17.	How much can you do to adjust your lessons to the proper level for individual students?	393	4.12	.818
TS18.	How much can you use a variety of assessment strategies?	393	4.10	.825
TS20.	To what extent can you provide an alternative explanation or example when students are confused?	393	4.34	.808
TS23.	How well can you implement alternative strategies in your classroom?	393	4.14	.825
TS24.	How well can you provide appropriate challenges for very capable students?	393	4.23	.861

Scale: **Efficacy in Instructional Strategies**

Regarding the 2nd Factor of Teachers' Sense of Efficacy Scale, (Efficacy in Instructional Strategies), and its associated practices, means and standard deviations can be found in Table 2. In teachers' view regarding "Efficacy in Instructional Strategies", the mean of all eight associated practices was in the "frequently" range. The highest mean out of the eight associated practices was "to what extent can you provide an alternative explanation or example when students are confused?" ($M = 4.34$, $SD = 0.81$). The lowest mean out of the eight associated practices was "To what extent can you craft good questions for your students?" ($M = 4.08$, $SD = 0.78$).

Table 3: *Descriptive Statistics for 3rd Factor of Teachers' Sense of Efficacy*

Teachers' Sense of Efficacy Scale		N	M	SD
Items.	Efficacy in Classroom Management	Teachers Responses		
TS3.	How much can you do to control disruptive behaviour in the classroom?	393	4.24	.818
TS5.	To what extent can you make your expectations clear about student behaviour?	393	4.06	.804
TS8.	How well can you establish routines to keep activities running smoothly?	393	4.15	.851
TS13.	How much can you do to get children to follow classroom rules?	393	4.37	.745
TS15.	How much can you do to calm a student who is disruptive or noisy?	393	4.11	.900
TS16.	How well can you establish a classroom management system with each group of students?	393	4.22	.762
TS19.	How well can you keep a few problem students from ruining an entire lesson?	393	4.04	.815
TS21.	How well can you respond to defiant students?	393	3.98	.836

Scale: **Efficacy in Classroom Management**

Concerning the 3rd Factor of Teachers' Sense of Efficacy Scale "Efficacy in Classroom Management", Table 8 provides the means and standard deviations of eight associated practices. All practices mean of teacher's responses fell within the range of "frequently" except "how well can you respond to defiant students?" ($M = 3.98$, $SD = 0.84$). The highest mean out of the eight associated practices was "how much can you do to get children to follow classroom rules?" ($M = 4.37$, $SD = 0.75$).

Table 4: *Descriptive Statistics for "Teachers' Sense of Efficacy Scale" – Combined*

Teachers' Sense of Efficacy Scale		N	M	SD
Combined		Teacher Responses		
I.	Efficacy in Student Engagement	393	4.19	0.48
II.	Efficacy in Instructional Strategies	393	4.18	0.48

III.	Efficacy in Classroom Management	393	4.15	0.49
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Table 4 elaborates descriptive statistics completely for all three factors of the Teachers’ Sense of Efficacy Scale. It can be seen that the teachers ranked themselves for each trial from a low mean score of 4.15 in 3rd factor of Teachers’ Sense of Efficacy Scale (Classroom Management’ Efficacy) represented on a Likert scale (5 points) to a higher mean score of 4.19 in 1st factor of Teachers’ Sense of Efficacy Scale (Student Engagement’ Efficacy).

DISCUSSIONS

This study concentrates on the quantitative procedure and TSES (Teacher Sense of Self Efficacy Rating Scale) was used for the collection of data. To probe whether teachers possess high or low self-efficacy beliefs, three variables of educator feeling of self-efficacy (TSES) i.e. Efficacy in Student Engagement, Efficacy in Instructional Strategies & Efficacy in Classroom Management with its eight associated behaviors on a 5-point Likert-type scale were accessed by using Tschannen-Moran and Hoy (2001) model of self-efficacy.

The three factors of teacher sense of self-efficacy (TSES) i.e. Efficacy in Student Engagement, Efficacy in Instructional Strategies & Efficacy in Classroom Management with its eight associated behaviors on a 5-point Likert-type scale means and standard deviations were noted. Most of the teachers’ behavior means were ranged “frequently” except for the factor Efficacy in Student Engagement practice, “how much can you do to help your students think critically?” (M = 3.97, SD = 0.846) and Efficacy in Classroom Management practice “how well can you respond to defiant students?” (M = 3.98, SD = 0.84) of the scale, which would indicate that teachers perceived themselves as regularly demonstrating the TSSE with three factors and their associated behaviors. The mean of the teachers’ self-ratings on the total scale ranged from 4.19 (Efficacy in Student Engagement), 4.18 (Efficacy in Instructional Strategies) to 4.15 (Efficacy in Classroom Management) on a 5-point Likert-type scale. The teachers who participate in this research as a group perceived themselves to demonstrate the behaviors identified in each subscale on a “frequently” range.

All the research participants strongly believed and agreed that they all understood the construction of Teacher Efficacy. They all responded overwhelmingly by saying that every teacher can achieve greatness by sheer hard work, self-belief in teacher efficacy, commitment, self-discipline and above all good manners. They also agreed that any negligence for work or one’s responsibilities and undisciplined behavior will hamper teacher efficacy which eventually reflects in students’ unsuccessful performance and achievement.

On the teacher survey, DA teaching staff responded quickly that they not only strongly believe in teacher efficacy, they also understood what it means to be termed as teacher efficacy. Teacher efficacy is a self-commitment that serves as a driving force for teachers “to bring out the best” and to be the best among the lot. The teachers were of the view that strong self-efficacy and commitment serve as a magnet that attracts all other supporting and enriching factors which when integrated and harmonized results in productiveness and positive results.

Recommendations

The TSSE Rating Scale is a survey that can be used in routine school settings to evaluate instructors. It is also used for teacher efficacy practices and to bear the difference of discernment that is present inside the school group. It is suggested that Principals of the schools start a drive to adopt this strategy and make the fundamental discoursed that will enhance their trials as a group and carry their observations nearer in accordance with the impression of their teachers with whom they work and lead. Educators, principals, school locale, and colleges may utilize the discoveries of this examination venture to support additional exploration into Teacher Efficacy and to empower the advancement of harmonious discernments.

It is prescribed that instructors' preliminary projects urge graduate understudies to seek after Teacher Efficacy research and add to the information officially gathered in regards to compelling Teacher Efficacy practices. In the event that a school group chooses to investigate their Teacher Efficacy practices, a suggestion would be that they utilize the Teacher's Sense of Efficacy Scale (TSES) which is a 24 & 12 - thing measure created by Tschannen-Moran and Hoy (2001) and it is likewise called the Ohio State Teacher Efficacy Scale (OSTES). Teachers can utilize this instrument to enhance their understanding of Teacher's Sense of Efficacy.

This examination venture's discoveries furnish educators with a base from which to talk about teachers' discernments of Teacher's Sense of Self Efficacy behaviors. Teachers can evaluate their own self-perceptions to the perceptions of other teachers regarding Teacher's Sense of Self Efficacy. Rich exchange can happen when instructors and principals direct these talks. Training division may utilize this exploration venture's discoveries to contribute dialogue and investigation when creating school change arranges. This review gives the instruction office three center ranges of Teacher's Efficacy that can progress toward becoming foci for dialogues, for expert advancement and school change.

Moreover, it is likewise suggested that future inquires would be centered around different measurements of Teacher's Efficacy, for example, the variables which have a positive impact on Teacher's Efficacy. It is additionally recommended that the future investigates on Teacher's Sense of Self Efficacy must include different levels of education such as higher education institutions and Govt. schools.

Conclusion

The TSES Subscales Efficacy in Student Engagement & Efficacy in Instructional Strategies and impact of educational qualification showed impressive results for teachers. The higher mean score of teachers, which is quite encouraging because the results not only show that these teachers have a higher teacher efficacy in student engagement and Efficacy in Instructional Strategies but also signify that they are using different strategies as well as activities to motivate their students to learn and perform better in classrooms. They were of the view that "Learning to take place genuinely, realistically and productively, a conducive learning atmosphere is required which has to be structured for the benefit, growth and progress of the learners.

Education is a 'learning system' and one most important component of this system is the art of creating a conducive environment for real learning to take place in a classroom. It greatly depends on the higher standard of learning atmosphere procreated and maintained by highly efficacious teachers. These results of "Efficacy in Student Engagement" are also important to teacher education

because they reflect the teacher's impact on student achievement. When a stimulating, favorable and caring atmosphere for learning is created and sustained for students, then the student is most likely to perform better and exhibit their willingness to learn and absorb. Research shows that teachers who possess high efficacy beliefs generate strong learning engagement, their learning experiences get more strengthened which impacts students' progress and achievements (Ross & Bruce, 2007).

In the end, the conclusion is that this research study provided important insights which would be helpful for academicians, educationists, researchers and policymakers to understand the dynamics of teachers' sense of self-efficacy in Pakistan. The descriptive data identifying the mean scores the extent to which teachers perceived themselves to use TSSE behaviors. By the data analysis, it has been revealed that teacher efficacy was understood and practiced in the Defence Authority Institutions by the teachers and they believed to display teacher efficacy behaviors frequently.

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