

## Effects of In-Service Teacher Training on Students' Psychological Development at Secondary Level

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### Abstract

The purpose of the study was to examine the effects of in-service teacher training programmes on students' psychological development at the secondary level in Rawalpindi District and Islamabad. The objectives of the study were; to identify the factors contributing to students' psychological development; to analyze the effects of in-service teacher training programmes on the students' psychological development; and to find out the relationship between in-service teacher training programmes and the most crucial psychological factors affecting the overall development of students. The research was descriptive and quantitative in nature. A sample of total 221 teachers and 672 students from Rawalpindi District and Islamabad was selected through stratified random sampling technique. Two self-developed questionnaires were used for gathering information from the participants. Statistical tools i.e., mean, standard deviation and chi-square test were employed for data analysis. The findings revealed that in-service teacher training programmes have a positive effect on the psychological development of students. There is a significant relationship between in-service teacher training programmes and the most crucial psychological factors effecting the overall development of the students. Based on findings, it was recommended that teachers may be trained professionally to provide better quality of education to students according to their psychological needs.

**Keywords:** in-Service teacher training, students' psychological development, secondary level

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## **Introduction**

In this era of scientific innovations, learning is measured as a primary pace for all human activities. Learning is a long-term process that indicates the civilization of a community. Learning is not just a mean to transmit understanding but it's a medium used to teach students and also make student who are mentally, physiologically, psychologically and religiously balanced (Ahmed, 2012). The education system generates literate, civilized, spirited and capable individual, who fulfill the vibrantly rising market demands (Ali, Jusoff, Ali, Mokhtar & Salamat, 2009). In this regard, trained teachers play a significant role in the development of the educational profession. The optimistic development of professional perspective of educators not only develops the educators' competence, but moreover assists in creating schools that are more appealing for both learners and educators. A large number of duties are there for teacher training institutes because well-educated, and trained teachers also professionally efficient (Government of Pakistan, 1998). The efficacy of educators in the classroom relies upon the efficiency of educator's training programs. To assess the usefulness of teaching one should see what is going on in the lecture room and specially the outlook of the educator in learning and educating condition. The educator's performance in this practice is associated with the understanding and skills that they acquire. A good professional instruction and preparation must for the effectiveness of learning and instructions.

The psychological level of the student facilitates the educators to realize their growth, they reach the extremity of their capabilities, the ways through which they grasp knowledge and their societal associations. Quality teaching has no alternative. It is important for the realization of educational goals. Creativity is the major foundation for exposure and progress of human beings. With the help of creativity, technical and industrial evolution is possible. If the teacher is creative, he/she may introduce numerous modern educational activities to create successful students and it also assists educators in encouraging the learners towards education. According to Harris & Sass (2011), Teacher training is a difficult personal welfare exercise that can considerably influence on student achievement. Educators and schools should keep pace with the latest progress in the area of educator's education and preparing so as to have the ability to develop their plans and the standard of instructing and getting education. The standard of education relies upon the aptitude, determination and devotion of the educator. Whenever an educator becomes unsuccessful in keeping himself connected with the fast technical

and instructive advancements then he will turn out to be incompetent and unproductive. The educator is measured as the most important element in executing every single teaching refinement at the grassroots level. Certainly, educational experiences, understanding of the topic, abilities and proficiency of instructing and the dedication of the educator have productive influence on the instructing and learning process.

Doyran (2012) depicted that not any of the changes we are suggesting will be successful unless we are capable to hire to the instructing occupation at every level, women and men of the most astonishing potentials, and can guide them. A lot of elements are important for developing the quality instructing. They consist of social and economic and ideological and needs, a present form of instructional framework, clearly defined hypothesis and application of instruction and learning. Educator preparing project, being a vital element of the schooling structure, has significantly extended and will increase more for taking into account the rapidly rising needs of the state. Educators are a state huge blessing. It is the worth of educators on which the number of inhabitants in a state primarily depends for brilliance. Educators' reliability relies on how they acquire duties and rights which are connected with the rank. Educators are dissimilar with regard to their attitudes and anticipation from the student. Agrawal (1995) said that the success of any learning improvement relies upon the excellence of educator preparing specialists. It is necessary to arouse state realization about essential developments to be produced in educator preparation. The modification in the set of courses creates advancement both in subject matter and instructional techniques. The reforms in techniques of instructing contain instructional tools, specialist knowledge, standard techniques and innovation technique and so on. It is noticed that educators can't instruct efficiently certain subject matters except he/she takes few type of in-employment preparation to remain himself/herself updated of the latest reforms and to deliver the information. The approach of the educators too altered with changing time and practice in educating. They build up latest attraction in particular areas like operational instruction to a child with mental illness, on latest techniques of educating, procedure of estimation and the like. Every requirement of educators could be fulfilled by in-employment programs.

Doyran (2012) expressed that nowadays the duty of an ordinary educator has happened to be demanding. Learning is a lively power and is managed by an educator. The educator occupies a vital place in schooling structure. He puts up considerably in developing of the personality of the persons and with their help structuring the state. He assists in transferring ethics carryout through mature cohort to successors. Educator performs an

important function in instructing the public. Therefore, the fortune of the state vastly relies on the educators' excellence. Certainly, learning excellence is strongly associated with development of instructional goals, strategies, plans, syllabus, amenities, and tools along with managerial arrangement although it's barely an educator which lays existence within framework. "Whenever capable educator is acquired, chances of accomplishing advantageous learning conclusions are considerably further, even if institutions might contain outstanding physical means as tools, constructions and manuals, and even if syllabus could roughly be acquired according to public demands if the educator are oddball or uninterested in their tasks, the complete plan possibly became unsuccessful and mostly dissipated".

### **The Student's Psychological Development**

Bandura (1997) illustrated that mental Growth indicates "the optimistic mental innovation of people." Entrepreneurial groups have an unusual state of self-adequacy, they keep positivity during the time spent in endeavor improvement of the unusual state of expectancy, they exhibit solid versatility during that time spent in attaining group objectives, which will easily drive the entrepreneurial group to consistently upgrade their knowledge and adapt some sort of accurate specialized learning and abilities essential for ventures, step up with concerns to first-rate the data helpful for undertakings, and reluctantly comprehend and secure the embodiment of specialized learning and expertise through repetition, join learning, facts and wisdom together, in order to advance undertaking expand social resource level and increment creativity's mechanical dimensions. Persons positive mental condition is based on mental expansion that is recognized by four mental assets: efficacy (self-confidence of doing a specific project), hope (one's proficiency to finish a particular objective), optimism (a confident conviction to attain objectives), and flexibility (ready to carry on with achievement when overpowered by issues).

### **Efficacy**

Bandura's (1997) said that the efficacy relay on the social academic assumption. It is described as "an individual faith about his skills to get the prizes, thankfulness, and solidification which are vibrant to finish an assignment". Ponder on viability has revealed that it has progressive association with occupational events, the student's prosperity, inspiration and inventiveness which can be inclined towards educator preparing.

**Hope**

Avey (2011) described that to stay optimistic and having a faith to achieve the best things in life and the belief to complete a difficult task with the best result comes under the definition of hope. It also covers strength of will and views of the one who educate others. Avolio (2004) depicted that self-reliance and surety of doing something should be qualities of trainee educator. They should have the ability to take different decisions and have surety of achieving wonderful future, since they are the leaders and they can increase the hope and high expectations in students and these educators can grow student's wants. The idea of expectation also includes confidence of individual and stability to accomplish an objective, and reform ideas and structures to achieve aims excellently.

**Optimism**

Cameron, Dutton & Quinn (2003) defined that the over-all populations who are optimistic for the most part they hope that great occasions happen more than awful occasions in the future. The confident person's kin have extra constructive presumption towards their upcoming and worriers have more negative perception towards their forthcoming. Prepared educators have a positive opinion with respect to their aims and destinations. Avolio (2004) demonstrated that skilled educators take everything on a positive note e.g. they conceive partial class as filled rather than vacant it can be useful for a trainer to be idealistic towards their student. Student's proficiency, responsibility, faith and invention can be expanded by positive educator. Positivity and confidence are equally valuable after an educator.

**Resiliency**

Cameron, Dutton & Quinn (2003) illustrated that the capacity of a trainer to acknowledge reality, and the inventive ability to revolutionize and can conform the alteration in basic circumstances. Flexibility is the important feature of that educator. At the point when individuals feel that they got achievement, they trust that achievement can equal their probabilities of disappointment. So, they can confront any kind of undesirable circumstance because of this flexibility in their thoughts despite the fact that present conditions may appear to be debilitating. Resiliency shows that prepared educator ought to be bendable and can possibly confront basic circumstances. Resiliency is defined as an idealistic mental proficiency to restore from indeterminate circumstances that builds progress and expansion. Cameron, Dutton & Quinn (2003)

depicted that resilient individual acknowledges reality, trust that life is important, and adjustment can be made in it with out too much effort.

### **Creativity**

Shalley (2004) said that the advancement and alteration in the present administrations, substances, thoughts, training and systems that can include or improve an encouragement in the hierarchical capacities come under the description of creativity. Amabile (1996) indicated that creativeness is a result of manner or process that including creating a thought and select them after assessment. West (2003) elucidated that structural creativity has a faith on administration and individual cooperation and correspondence that they need to trade thoughts or improve inventive results. Singular undertaking distinctiveness, coworkers, authoritative condition, faith, labor policy, educator are the components which are having impact on imagination. Woodman (1993) depicted that this vibrant informative product named as creativity is often very difficult. Innovative thoughts are significant on both a personal and collective level. Creativity is the development of an item that is both innovative and valuable inside a communal setting. All individuals who are fit for building learning are fit for construction of their imagination.

### **Objectives of the Study**

- i. To identify the factors contributing to students' psychological development at secondary level.
- ii. To analyze the effects of in-service teacher training programmes on the psychological development of students at secondary level.
- iii. To find out the relationship between in-service teacher training programmes and the most crucial psychological factors affecting the overall development of students.

### **Hypotheses of the Study**

**Hypothesis 1.** There is no significant effect of difference in-service teachers training programme on students' psychological development.

**Hypothesis 2.** There is no significant relation between in-service teacher training programme and the most crucial psychological factors affecting the overall development of students.

## Materials and Methods

### Population

The main purpose of the present research was to examine the relationship between in-service teacher training programme and the most crucial psychological factors affecting the overall development of students. In educational research, it is imperative to ensure an accurate depiction of the population of the subjects or elements under investigation, i.e., persons, objects, organizations, etc. (Ross, 2005). The population is comprised of all the individuals or elements of interest, usually data for each individual in the population is not available. In the current study, all male and female teachers and students working and studying in government schools of Rawalpindi District and Islamabad constituted the population of the study. There were total 74 Government schools in Rawalpindi District and 48 Government schools in the Islamabad. The target population was composed of 2355 students and 164 teachers in schools of Rawalpindi and 2901 students and 138 teachers in schools of Islamabad.

### Sample and Sampling Technique

Sample is a small part of a large population chosen for study and investigation. The subject of the entire population which is examined by a researcher and whose distinctiveness is general to the entire population is known as a sample. Selection of participants was supported by the standards provided by Krejcie and Morgan (1970) and later the standards supported and cited by Gay (2000). As the population was heterogeneous due to gender i.e., male and female teachers and students, therefore, the stratified random sampling technique was used for the selecting sample for the study. In this way, a total 221 teachers (male & female) and 672 students (male & female) were selected as a sample. The following table 1 indicates the population as well as a sample of the study:

Table 1

*Population and Sample Size*

Districts	Schools		Teachers		Students	
	Total	Sample	Total	Sample	Total	Sample
Rawalpindi	74	15	164	118	2355	331
Islamabad	48	14	138	103	2901	341
Total	122	29	302	221	5256	672

## Research Design and Instruments

The study was quantitative and descriptive that was designed to examine the effect of in-service teacher training programme on student's psychological development at secondary level. After going through the relevant literature, two structured questionnaires were developed for the students and teachers for collecting the data for this study. The instruments were divided into broad categories i.e., teacher training, creativity, motivation, and students' performance. The instruments were designed on five-point Likert scale i.e., Strongly-Agree, Agree, Un-Decided, Disagree, Strongly-Disagree and were scored as 5, 4, 3, 2, and 1 respectively. The questionnaire for students contained 31 items, and the questionnaire for teachers contained 35 items.

## Pilot Testing, Validity and Reliability

In order to get authentic and precise outcomes, it was imperative to validate the instruments and that's why it was pilot tested in 15 secondary schools to ensure its precision, appropriateness, suitability, and practicably. Furthermore, it was properly reviewed by a panel of experts of the relevant field having extraordinary experience. The instruments were validated with respect to face validity, content validity, and criterion validity. Some items were found weak and were deleted. Some were rephrased for the sake of better understanding of the respondents. Then its final version was prepared in the light of the suggestions of the experts. Additionally, Cronbach's Alpha was used to calculate the reliability of questionnaires. In this way, the Cronbach alpha was found 0.75 for the teacher's questionnaire and 0.73 was found for the student's questionnaire.

Table 2

### *Cronbach's Alpha Reliability of Teachers' Questionnaire*

Sub-Scales of Teachers' Questionnaire	No. of Items	Cronbach's Alpha
Teacher Training	08	0.76
Creativity	04	0.73
Motivation	10	0.79
Students' Performance	13	0.71
Mean	8.75	0.75

Table 2 shows the Average Internal Consistency Reliability (Cronbach's Alpha) of the subscales of teachers' questionnaire. Cronbach's Alpha indicates that each subscale has a high reliability coefficient. Besides, the analysis reveals that the overall internal consistency reliability (Cronbach's Alpha) of teachers' questionnaire was found 0.75 which confirms that the instrument is a remarkably reliable research instrument.

Table 3

*Cronbach's Alpha Reliability of Students' Questionnaire*

Sub-Scales of Teachers' Questionnaire	No. of Items	Cronbach's Alpha
Teacher Training	05	0.72
Creativity	06	0.70
Motivation	07	0.76
Students' Performance	13	0.73
Mean	7.75	0.73

Table 3 shows the Average Internal Consistency Reliability (Cronbach's Alpha) of the subscales of students' questionnaire. Cronbach's Alpha indicates that each subscale has a high reliability coefficient. Moreover, the analysis reveals that the overall internal consistency reliability (Cronbach's Alpha) of students' questionnaire was found 0.73 which confirms that the instrument is a remarkably reliable research instrument.

## Data Collection and Analysis

Data collection process was initiated on 15 September 2016 and completed on 30 December 2016. The researchers personally visited the target sample. Before the distributing of questionnaires, the purpose of the study was explained to the respondents and they were asked to respond freely without any hesitation. Then questionnaires were delivered to respondents and 100% response rate was achieved due to follow up study. Raw data was collected, classified, tabulated, analyzed and interpreted through descriptive statistics, i.e., mean, standard deviation and inferential statistics, i.e., chi-square to find out the relationship between the in-service teacher training programs and the most crucial psychological factors effecting the overall development of the student at the secondary level.

## Results

The study was descriptive and quantitative that was planned to investigate the effectiveness of teacher training on students' psychological development at the secondary level in the Rawalpindi District and Islamabad. Two self-developed-structured questionnaires were used for gathering information from the respondents. After the collection of data, it was properly organized, classified, tabulated and analyzed through descriptive statistics, i.e., mean, standard deviation and inferential statistics i.e. chi-square.

### ***Factors Contributing to Students' Psychological Development at Secondary Level***

**Hypothesis 1.** *There is no significant effect of difference in-service teachers training programmes on students' psychological development.*

Table 4

*Descriptive Statistics of Factors as Revealed by students*

Factors	<i>N</i>	Mean	<i>SD</i>
Teacher Training	672	4.7638	1.5381
Creativity	672	3.2654	0.1838
Motivation	672	3.3765	1.3795
Students' Performance	672	3.2967	1.1586

Table 4 demonstrates that the descriptive statistics of the study factors related to students which includes mean and standard deviation of the major student factors from highest mean scores to lowest mean scores. Teacher training, Motivation and students' performance are at highest level with mean 4.3638, 3.3765 and 3.2967 respectively and considered as strong contributors for students' psychological development. Furthermore, Creativity is categorized as lower contributing factors having mean value 3.2654.

Table 5

*Descriptive Statistics of Factors as Revealed by Teachers*

Factors	<i>N</i>	Mean	<i>SD</i>
Teacher Training	221	3.6772	1.7574
Creativity	221	3.3618	1.5328
Motivation	221	4.9864	1.9884
Students' Performance	221	3.0526	0.3357

Table 5 shows that the descriptive statistics of the study factors related to teachers which include mean and standard deviation of the major teacher

factors from highest mean scores to lowest mean scores. Motivation, Teacher training and Creativity are at highest level with mean 4.9864, 3.6772 and 3.3618 respectively and considered as strong contributors for teachers' in-service training. Furthermore, students' performance is categorized as lower contributing factors having mean value 3.0526.

***Relationship between In-Service Teacher Training Programs and Students' Psychological Development at Secondary Level***

**Hypothesis 2.** *There is no significant relation between in-service teacher training programme and the most crucial psychological factors affecting the overall development of students.*

Table 6

*Association between Teachers' Responses and Students' Creativity*

Teachers' Responses	Students' Creativity			Total	Contingency Coefficient	$\chi^2$	df
	Low	Medium	High				
Low	245	27	0	272	0.381	113.90	4
Medium	269	106	01	376			
High	03	19	02	24			
Total	517	152	03	672			

$p$ -value < 0.05; Significant at  $p=0.01$

Table 6 shows that calculated  $\chi^2$  value (113.90) in the above case is greater than the table value of chi-square which is 9.488. It indicates that there is a strong association between teachers' responses and students' creativity as the value of chi-square association is 113.90 and contingency coefficient is 0.381 which indicates strong association. The  $p$ -value which is 0.01 also indicates that there is strong relationship between the categories teachers' responses and students' creativity. Hence, it is proved that there exists strong association between categories teachers' responses and students' creativity. Therefore, null hypothesis was rejected.

Table7

*Association between Teachers' Training and Students' Motivation*

Teachers' Training	Students' Motivation			Total	Contingency Coefficient	$\chi^2$	df
	Low	Medium	High				
Low	215	35	0	250	0.376	110.70	4
Medium	289	112	0	401			
High	13	05	03	21			
Total	517	152	03	672			

$p$ -value < 0.05; Significant at  $p=0.01$

Table 7 depicts that calculated  $\chi^2$  value (110.70) in the above case is greater than the table value of chi-square which is 9.488. It indicates that there is strong association between teachers' training and students' motivation as the value of chi-square association is 110.70 and contingency coefficient is 0.376 indicates strong relationship. The p-value which is 0.01 also indicates that there is statistically strong relationship between the categories teachers' training and students' motivation; hence it is proved that there exists strong association between categories teachers' training and students' motivation. Therefore, null hypothesis was rejected.

Table 8

*Association between Teachers' Training and Students' Performance*

Teachers' Training	Students' Performance			Total	Contingency Coefficient	$\chi^2$	df
	Low	Medium	High				
Low	333	44	0	377	0.344	90.380	4
Medium	182	99	02	283			
High	02	09	01	12			
Total	517	152	03	672			

$p$ -value < 0.05; Significant at  $p=0.01$

Table 8 indicates that calculated  $\chi^2$  value (90.380) in the above case is greater than the table value of chi-square which is 9.488. It indicates that there is strong association between teachers' training and students' performance as the value of chi-square association is 90.380 and contingency coefficient is 0.344 indicates strong association. The p-value which is 0.01 also indicates that there is statistically strong relationship between the categories teachers' training and students' performance; hence it is proved that there exists strong association between the categories teachers' training and students' performance. Therefore, null hypothesis was rejected.

## Discussion

The present research is based on the effect of in-service teacher training programs on student's psychological development at secondary level. Two self-developed questionnaires were used for gathering the information from the respondents. Questionnaires were divided into broad categories i.e., teacher training, creativity, motivation, and students' performance. According to Harris & Sass (2011), teacher training is a difficult personal welfare exercise that can considerably influence on student achievement. In contemporary study training makes the teacher a good leader who led their

students and show them right path. It brings perfection in teachers. After training teachers get more knowledge and opportunities for improvement. It gives confidence in applying new techniques and methods for quality leadership and makes the teacher more competitive. Through training teachers get more information. It opens new doors for them.

Conant (1963) indicated that the efficient educator is competent enough to create a passion for learning and can improve quality of education which depends on hard work and dedication of teacher. It was clear in this study that a trained teacher knows different methods of teaching. He/she is more-able to improve the standards of quality education and convince and motivate the students in a better way. The trained teacher is more efficient than untrained teacher and he/she can teach the students in more effective way. Through training teachers are able to deal with their students according to their psychological level. They can give rewards, titles to students on their performance and tell them their positive points and mention their skills in front of the class this will motivate students to do even better in future and they will polish their skills in a better way also for the sake of reward. Bandura (1997) wrote that the efficacy relay on social academic assumption. It is described as "an individual faith about his skills to get the prizes, thankfulness, and solidification which are vibrant to finish an assignment".

According to West (2003), the structural creativity has a faith on administration and individual cooperation and correspondence that they need to trade thoughts or improve inventive results. This study also narrates that to promote creativity in students, teachers should hold competitions among students like art competition, model making competitions. It makes the students creative. Practical work can be held in classes. Competition based learning should be promoted among students. Drill method is best method; activity-based learning is also good. Creative writing competitions should be planned in which students should be free to write about their views and thoughts. Arts and crafts competitions and projects should also be done.

As indicated by Maslow, just a little measure of individuals reaches at this phase of self-completion. These individuals require an individual satisfaction "to develop" and "to create". The results of current research indicate that a trained teacher is able to motivate the students in a better way. He/she can motivate the students by presenting new ideas practically and giving them rewards. He/she should focus on each student and motivate them through creative activities so that the students will give good performance. He/she can develop habit of self-study among students. A trained teacher knows the psychology of students, so he/she can use different method of studies to teach them.

Training makes the educators skilled and highly profiled. So that skilled educators can take everything on a positive note e.g. they conceive partial class as filled rather than vacant it can be useful for a trainer to be idealistic towards their student. Similarly, Avolio (2004) narrated that Student's proficiency, responsibility, faith and invention can be expanded by positive educator. The techniques which can be applied by a trained teacher to encourage the students include drill method, quiz competitions, class assessments, and group competitions. Teacher should appreciate the students' in front of the class and tell them their weaknesses in private. Coordination with the parents is also helpful. A trained teacher can also award titles to their students and give them rewards to enhance their performance. Chi square shows that there is a strong relationship between in-service teacher training programs and the most crucial psychological factors effecting the overall development of the students.

## **Conclusions**

The findings show that there is a strong relationship between in-service teacher training programmes and the most crucial psychological factors effecting the overall development of the students. Teacher training is the basic unit of the educational institutions. It develops personality and character of students. The quality of education depends on the ability, hard work and dedication of the teachers. With the help of training, teachers may be able to teach the students according to their psychological level. The training sessions help them to get new ideas and groom their abilities to teach alternatively and may also help them in developing creativity and innovation in students for their better performance and for this purpose students have to undertake practical activities. The training helps them in motivating students towards their studies. Teachers' appreciations, creating sense of competition among students and genuine efforts motivate students to do even better.

## **Recommendations**

Teachers may be trained to provide better quality of education to students according to their mental needs. Opportunities should be provided to teachers to get training for enhancing their skills to develop creativity in students. Teachers may be trained so they may play a vital role in enhancing the motivation capability in students to get better results. In this way, the teachers will be able to organize creative activities for motivating students and enhancing their performance.

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