

**APTITUDE OF PROSPECTIVE TEACHERS FOR  
TEACHING AS PROFESSION AND ITS  
RELATIONSHIP WITH THEIR ACADEMIC  
ACHIEVEMENT**



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Submitted in partial fulfillment of the requirements for the  
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Islamabad.

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## APPROVAL SHEET

### APTITUDE OF PROSPECTIVE TEACHERS FOR TEACHING AS PROFESSION AND ITS RELATIONSHIP WITH THEIR ACADEMIC ACHIEVEMENT

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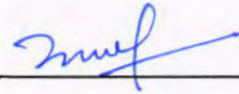
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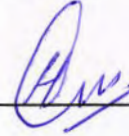
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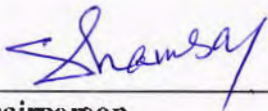
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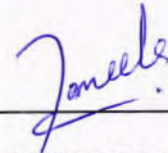
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## **AUTHOR'S DECLARATION**

It is hereby declared that author of the study has completed the entire requirement for submitting this research work in partial fulfillment for the degree of MS Education. This thesis in its present form is the original work of the author expecting those which are acknowledgement in the text. The material included in the thesis has not been submitted wholly or partially for award of any other academic certification than for which it is being presented.



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## **CERTIFICATE**

The thesis entitled "Aptitude of Prospective Teachers for Teaching as Profession and its Relationship with their Academic Achievement submitted by Tanzeela Naz in partial fulfillment of MS Education has been completed under my guidance and supervision. I am satisfied with the quality of student's research work and allow her to submit this thesis for further process of as per IIU rules & regulations.

**Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Prof. Dr. Samina Malik**

## **DEDICATION**

*I dedicate this to my CREATOR, HOLY PROPHET (PBUH),*

*Beloved Parents, other family members & my all respected  
teachers for all their love and attention which has made it possible  
for me to make it up to this point.*



## **ACKNOWLEDGEMENTS**

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Researcher owes a debt of gratitude to her beloved parents, spouse and other family members who prayed for her and gave moral and financial support for the completion of this research work. The researcher acknowledged specially Dr. Shafqat Ali Janjua who provided every kind of physical and moral support for the completion of this difficult task. Researcher would like to express her gratitude to the students and teachers participated in this study. Without them, this study would not have taken place. May Allah Almighty bless all of them and help her to be as helpful for them in the time of their need. Ameen!

**TANZEELA NAZ**

## ABSTRACT

“Good teachers are born, not made.” It goes without saying that effective teacher is one of the main pillar of education system, the more he is efficient the more learning achievement are obtained .The present study was conducted to find out the relationship of prospective teachers’ aptitude for teaching as profession with their academic achievement. Population of the study were all the B.Ed students of universities and degree awarding institution of the Islamabad who were offering B.Ed one year regular program under formal education system. Universal sampling technique was used. Data were collected from all (86) B.Ed students of semester Fall 2014 and Spring 2015 of selected institutions of Islamabad. Teaching Aptitude Test Battery (TATB) developed and standardized by Sing and Sharma (2011) was adapted to find out the aptitude of prospective teachers. As an academic achievement of prospective teachers, marks of midterm exam were collected from the selected departments. Mean and co-efficient of co-relation of population were used to get the answers of the framed research questions and hypothesis. The analysis was done by the use of statistical package for Social Sciences (SPSS) software version 20. It was found that prospective teachers have average level of aptitude for teaching as profession. No gender differences were found. Over all academic achievement was above average level and there was no significant difference found between academic achievement of male and female prospective teachers. Co-efficient of co-relation ( $\rho$ ) was .02, which indicated that no significant relationship was found between the aptitude of prospective teachers for teaching as profession and their academic achievement.

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# CHAPTER 1

## INTRODUCTION

It is universally accepted that academic growth and intellectual expansion of a nation is shaped by the quality of its citizen and this quality is inseparably linked with the quality of education which is imparted by the effective and quality teachers. It is an open secret that the teacher is the prime agent of that quality change which is responsible to bring positive and permanent change among students' behaviors and minds. They are the main actors who play central role in developing positive and creative learning experiences, which encourage students and their parents to give importance and value to education.

It goes without saying that effective teachers are one of the main pillars of education system, the more they are efficient, the more learning achievement are obtained. Nadeem, Naz, Haq & Bibi (2012) articulated that if the education system has outstanding resources but the teachers have no professional aptitude and are incompetent or unresponsive to their responsibilities, the whole system is likely to be ineffective and largely wasteful. Different researches show that for the effectiveness of teachers, we have to improve teacher education programs through different means viz., improving plans and policies, curriculum, textbooks, and providing conducive environment to teachers for practice . On the other hand, different characteristics of quality teachers are enlisted by the researchers, of which aptitude is one of the main and basic determinants and predictor of effective teachers.

The identification of qualified and able teachers constitutes one of the most important of all educational concerns. For the effective productivity of future teachers, several pre-service and in-service teacher training programs are offered by the national and international institutions and universities in the country as well as abroad through which we get quality teachers, for quality nation. Academic achievement is the capabilities, skills knowledge attained by individuals in the subjects of the training program which can be assessed by the test scores or by marks assigned by the teachers. Sajan (2010) mentioned some factors which influenced the prospective teachers' achievement few of them are stress, motives, attitude, socio-economic status, aptitude and so on.

This study was an attempt to highlight the need and importance of teaching aptitude of the student teachers' undergoing B.Ed. course in the universities and institutions of Islamabad and to investigate the level of professional aptitude of prospective teachers and its relationship with their academic achievements.

Profession should be carefully selected because it is the important phase of every one's life (Ali, Zeb & Amina, 2013). The career as well as profession of a person is affected by his/her aptitude towards that profession. For successful career, both should be in harmony (Canel, 2007). In the present scenario of Pakistan, the least productive or even negatively performing educators have sufficient room to carry on, nothing can be done against them because in Pakistan there is no proper selection procedure in which aptitude of student teachers' could be checked. Only the base is their academic achievement in prior degree programs. We can say that regarding many other reasons this



is one of the reasons that significant number of working teachers have other engagements to earn some sort of financial gains and mostly they are continuously searching for the better jobs other than teaching profession. In the selection of quality teachers, the main importance should be given to their interest in profession, abilities, skills and best personality traits which are required for this profession (Martin, Craft & Tillema, 2002). Ali et al., (2013) further enlisted factors those are important in selection of teaching as profession or career like family background, socio-economic factors, aptitude, qualification and gender.

Out of the personal experience of the researcher in her teachers training education, she noticed that in the introductory classes, teacher educators mostly asked “Why you are going to join this profession?” Only few of them replied that they love this profession or they have chosen teaching profession by their own choice. But their academic results were different from their answers or we can say in other words their aptitudes. This study provides empirical evidence that aptitude is related to academic achievement of prospective teachers or not? Is there any need to change the selection procedure of the prospective teachers and provides the opportunity of teaching only to those who have aptitude of teaching for the quality education system/ output or not? Here the question arises that whether good teachers should be selected on the bases of aptitude of teaching profession or on the bases of their academic performance? Before it no research has been conducted to know the direct aptitude of prospective teachers and its relationship with their academic achievement in teacher education institutes of Pakistan. This study was an attempt to remove the deficiency of research in this specific area.

### **1.1 Statement of the Problem:**

According to the famous saying "good teachers are born, not made". In Pakistan at every level there is a dying need of such persons who are sincere, hardworking and have interest in teaching profession, in other words person having aptitude of teaching profession are the requirement of the era. Many teacher training institutions and universities are producing future teachers throughout the country. Many other organizations and departments of education are working under different projects to improve the quality of these training programs. But researches show that there are many personality factors which have great influence and affect on the performance of student teachers'. For this purpose the baseline study was an attempt to investigate prospective teachers' aptitude for teaching as profession and the relationship of aptitude with their academic achievement. So the statement of the proposed study was worded as "*Aptitude of Prospective Teachers for Teaching as Profession and its Relationship with their Academic Achievement.*"

### **1.2 Objectives of the Study:**

The main objectives of the study were to:

1. Investigate the level of aptitude of prospective teachers for teaching as profession.
2. Examine the difference between the aptitude of male and female prospective teachers for teaching as profession.
3. Find out the academic achievement of prospective teachers.
4. Determine the relationship between teaching aptitude of prospective teachers and their academic achievement.

### **1.3 Research Questions:**

Following were the main research questions of the study:-

1. What is the level of teaching aptitude of prospective teachers for teaching as profession?
2. What is the difference between the aptitude of male and female prospective teachers towards teaching as profession?
3. What is the level of academic achievement of prospective teachers?

### **1.4 Hypothesis:**

H<sub>0</sub> 1: There is no significant relationship between teaching aptitude and academic achievement of prospective teachers?

### **1.5 Significance of the Study:**

This study would be helpful for the policy makers, university administrators, educationists and other stakeholders to get factual knowledge about the need and importance of teaching aptitude test for future changes, which is used in many other professions like medicine, armed forces, engineering, but neglected in teaching profession which is known as mother of all professions.

If before training, the teacher educators know the aptitude of trainees toward teaching profession, it would help him/her to classify the individual potential traits, skills, attitudes, and abilities then he/she may guide student teachers according to their needs and it will also help the trainer teachers and trainee teachers to improve academic

and it will also help the trainer teachers and trainee teachers to improve academic achievement. The significance of this study is estimated by the empirical evidences about the right value of teacher aptitude test as a predictor of candidate success in a teacher preparation programs as well as in the teaching profession. This information addresses the need of pre-service programs to ensure quality in both preparation and graduates.

### **1.6 Delimitations:**

This study was delimited in following ways due to time, logistic and financial constraints:

1. Only regular students of B.Ed (one year) enrolled in formal education program were included as prospective teachers.
2. Universities and institution of Islamabad those were offering Regular B.Ed (one year) program through formal education system in session Fall (2014) and Spring (2015) for both male and female:-
  - i. National University of Modern Languages, Islamabad
  - ii. Preston University, Islamabad
  - iii. Federal Collage of Education, Islamabad
3. The population was also delimited to only those regular students of B.Ed program, who were newly enrolled in session Fall (2014) and Spring (2015) of selected universities and institution of Islamabad.

## **1.7 Methodology of the Research Study:**

The study was quantitative in nature. The co-relational research design was used to investigate the professional aptitude of prospective teachers and its relationship with their academic achievement.

### **1.7.1 Population:**

All the freshly enrolled male and female prospective teachers of formal B.Ed program of Fall 2014 and Spring 2015 of public and private universities and degree awarding institution of Islamabad was the population of this study.

### **1.7.2 Sample:**

Universal sampling technique was used. All the newly admitted male and female students of regular B.Ed program of batch Fall (2014) and Spring (2015) of selected universities and degree awarding institution of Islamabad. Strength of the students was not inaccessible; so that researcher took whole population for data collection.

### **1.7.3 Instrumentation:**

Standardized tool "Teaching Aptitude Test Battery (T A T B)" developed and standardized by Singh and Sharma was adapted for the data collection after making it cultural free tool with the help of experts' opinions. Especially all the proper nouns not related to Pakistani Culture (names of the special persons, place and things) used in the items were changed by the researcher with the help of educational experts and keeping in view the research ethics. The tool consists of the following five dimensions related to

Aptitude of Prospective Teachers. These dimensions were presented as five-subtests respectively:

- (1) Mental Ability
- (2) Attitude towards children
- (3) Adaptability
- (4) Professional information
- (5) Professional Interest.

Above mentioned major dimensions cover many other aspects like: Verbal Comprehension, Numerical Reasoning, Self-confidence, value of student teaching, use of instructional methods, admissions standards, and program administrative concerns, Program expectations, Program demands and satisfaction, Program themes, Critique of certification classes, Classroom discipline, Views about teacher burnout and Future plans.

#### **1.7.4 Data collection:**

To find out the level of Teaching Aptitude of prospective teachers, Teacher Aptitude Test Battery (T A T B) developed and standardized (2011) by Singh and Sharma was administered to the selected sample. The data were collected in first two weeks of both semester, Fall (2014) and Spring (2015) when the actual classes started because the aptitude should be measured before the training. The data were collected from those students only who were freshly enrolled in both semesters.

To find out the academic achievement of prospective teachers, results of midterm exams of selected sample of B.Ed. students were obtained from the record of selected universities and institutions.

### **1.7.5 Data Analysis:**

Data were analyzed by the use of software SPSS. (Statistical Package for the Social Sciences). The scoring key and instructions were kept in mind during data analysis. Mean and co-efficient of correlation was used to know the answers of the framed research questions and hypothesis for this study.

### **1.8 Operational Definitions of Major Terms:**

The main terms of the problem statement are defined below for the meaning as used in this study.

#### **1.8.1 Aptitude:**

It is an inbuilt / natural/ by birth ability and strength toward something. However, it is a present condition (including some behavioural and psychological characteristics) having something to do with the future.

#### **1.8.2 Teaching Aptitude:**

It is an inbuilt / natural/ by birth ability and strength toward teaching, how a person will perform in future as a teacher.

#### **1.8.3 Prospective Teachers:**

All the freshly selected candidates of one year regular B.Ed program of formal education system.

#### **1.8.4 Academic Achievement:**

For this study academic achievement means marks obtained in first midterm exams conducted by the universities and institutions after few months of regular classes (Session Fall 2014 and Session Spring 2015).



## CHAPTER 2

### REVIEW OF RELATED LITERATURE

As it is worldly accepted that teacher and teacher education is the important aspects of nation's progress. Different researches are conducted in the world for the empirical evidences related to the quantity as well as quality of education. Since many years professional aptitude and its effect on achievement have been also debatable and burning issue in many professions, all over the world. In this context the present study is an attempt to estimate the extent of relationship of aptitude of prospective teachers for teaching as profession and academic achievement of prospective teachers.

#### **2.1. Aptitude:**

The word "aptitude" is derived from the Latin words "Aptitudo & Aptus" which mean "fitted for". According to Cambridge dictionary it means "A natural ability or skill". Jalal, (2012) says "aptitude is the natural or inborn ability to learn". According to Tasleema & Mudasir (2012) aptitude is a particular ability and capacity which is inborn but different from the general intellectual ability. It help an individual to attain degree of proficiency or level of achievement which is required for that specific area, field, occupation or profession.

Aptitude's abstract nature has predictive value. It is not a single factor, but a combination of several elements (Bingham, 1948). Like intelligence, aptitude is also a combination of various kinds of abilities for specific task, and it is based on those personality factors which are necessary for the future success in that specific field or training.

## **2.2. Aptitude Test:**

Test is the way through which an individual knows his strengths, weaknesses, and tells the unbiased results about the purpose for which test is administered. Aptitude test is from one of these tests. It is the example of psychometric tests which are systematic and standardized method for assessment of psychological and behavioral characteristics of persons. The term "aptitude test" is being used in a variety of ways. In general it appears that the term is being applied primarily to such tests which measure abilities which are not the direct result of specific environmental experiences and which are used to predict success at some future time. Aptitude tests are used to know the predisposition and behavior of individuals in a specific field to get the level of success in certain training, job or activity in long terms. Such types of tests are used to predict success or failure on the bases of inherent characteristics of individuals. It assumes that an individual has inborn or inherent strengths or weaknesses regarding that profession or field. It doesn't test the level of knowledge of the person. It is commonly based on general intellectual activities, certain personality characteristics, and behaviors etc which are related to that training, job, activity or profession. It doesn't need any preparation. Mostly aptitude tests are comprised of different test batteries, or sub tests. One or two test batteries are related to some intellectual abilities like spatial ability, numerical ability, and verbal ability. The other part is usually composed of those areas which are directly relevant to the job or training for which the test is going to be conducted.

Aptitude tests are like a gate keeper that's why command great respect and therefore possess immense influence in modern society. It mostly measure homogeneous segments of an ability and often used for the prediction of future performance.

Aptitude tests typically make fewer assumptions about specific prior learning experiences and are designed primarily to predict future performance in schools or training programs. For example, a clerical aptitude test is used to predict future performance in the position of clerk or secretary, a scholastic aptitude test might be used to know the future academic performance in college. Many other fields like medical, mechanical, engineering etc. are using it for the same purpose.

### **2.3. Types of aptitude Tests:**

It is clear from the definitions and concepts that aptitude is inborn ability and aptitude tests are the ways through which we can come to know the level of success or failure of an individual for the specific field, training or profession. These tests are mostly used for admissions, placements, job recruitments, job promotions, guidance, and educational researches. There are many types of aptitude tests which are being used in the world but in Pakistan following are commonly used :

#### **2.3.1. Scholastic Aptitude Test:**

It is commonly known as SAT and widely used for the selection of college and university students. It tells ability to succeed in collage or school. These type of aptitude tests mostly have items related to analogies, unscrambling sentences, numerical and analytical reasoning.

#### **2.3.2. Vocational Aptitude Test:**

Through it we can come to know the ability to succeed in any vocational occupation or profession.

### **2.3.3 Differential Aptitude Test:**

DAT is a series of assessments designed to measure an individual's ability to learn or to succeed in a number of different areas such as mechanical reasoning, verbal reasoning, numerical reasoning and space relations.

### **2.3.4 National Aptitude Test:**

It is commonly known as NAT. Candidates appear in a single test only and stands eligible for admission to all associated institutions in the respective subject group.

### **2.3.5 Medical College Admission Test:**

MCAT has to be taken by those individuals who are interested to get admission in medical institutions and universities. Mostly it is also comprised of such items which are related to verbal reasoning, physical sciences, biological sciences and language proficiency.

### **2.3.6 General Aptitude Test:**

It is of two types, GAT general and GAT subject. GAT general is used for MS/ M.Phil admissions and HEC scholarship schemes and second one is necessary for admissions in P.hds.

NTS (National Testing Service) is the organization which is conducting such sort of aptitude tests. Mostly these tests are objective type in nature. Some tests are paper pencil tests and few of them are computer based tests. These tests are divided into different sub tests or batteries. Analogy, numerical reasoning, language ability, mental ability, reasoning, analytical ability type part are compulsory in all sort of aptitude tests.

Remaining portion is composed of profession or specific purpose for which the test is going to be taken in fix given time.

#### **2.4. Teaching Aptitude:**

Aptitude means 'fit for' likewise teaching aptitude means fit for the teaching profession. Nadeem et. Al., (2012) & Darling-Harmond (1998) articulated that modern concept of teaching aptitude is all the school level professional activities such as co-operation in teams, building professional learning communities, participating in school development, evaluation and changing working conditions.

To find out the level of prospective and working teachers' aptitude, teaching aptitude tests are used in many countries. Teaching aptitude tests measures potential abilities those indicated success of related tasks in future times. The purpose is prediction and their focus often is narrowed to a single ability or small collection of related abilities. It tell us about the different aspects of aptitude which are needed for the teaching profession e.g. mental abilities of teacher, attitude of teacher toward children, what is the level of adaptability of teacher, basic skills, professional information which he/ she is going to join and how much he/ she is interested.

## 2.5. Constructs of Teaching Aptitude:

From the different studies and literature following are the major constructs, dimensions and areas which are related to teaching aptitude:

Kohhar, (2006) enlisted few traits related to teaching aptitude:

- |                         |                               |
|-------------------------|-------------------------------|
| i. Interest in people,  | vii. Sympathetic imagination, |
| ii. Interest in events, | viii. Good character          |
| iii. Love for reading,  | ix. Good health,              |
| iv. Patience,           | x. Interest in co-curricular  |
| v. Originality          | activities.                   |
| vi. creative power,     |                               |

Taslema & Mudasir (2012) found in their study that elementary and secondary teachers have difference aptitude level in 6 dimensions from following areas related to teaching aptitude:

- |                                      |                            |
|--------------------------------------|----------------------------|
| i. Co-operative Nature,              | vi. Moral character        |
| ii. Conservativeness,                | vii. discipline,           |
| iii. Wide interest,                  | viii. Optimistic attitude, |
| iv. scholarly taste,                 | ix. Motivational Aspect,   |
| v. Fair-mindedness&<br>impartiality, | x. Dynamic Personality     |

Nadeem et.al., (2012) quoted following areas which are important for teaching aptitude:

- i. Co-operation in teams,
- ii. Building professional learning communities,
- iii. Participating in school development,
- iv. Evaluation,
- v. Changing working conditions,
- vi. verbal comprehension,
- vii. word fluency,
- viii. number facility ,
- ix. spatial ability,
- x. associative memory ,
- xi. perceptual speed,
- xii. general reasoning.

**(1) Mental Ability:**

Generally mental ability is referring to the full and harmonious functioning of complete personality of the individual. It is the power to learn or retain knowledge; and understand the behavior of individuals. Some other words are used synonymously like I.Q level, intellectual ability, mental capacity, understanding etc. In teaching profession mental ability is an important aspect. If the teacher will be mentally able then he/she can teach, guide, help, and inspire the students according to their needs and requirements because students have to achieve their educational goals effectively with the help of proper

guidance of the teachers. Effective teaching is linked with the realistic thoughts and analytical skills of the teacher which could be used according to the situation. According to the analysis of different aptitude tests and literature review, it is found that mental ability is the compulsory part of all aptitude tests. It is comprised of items about verbal reasoning, word problems, analogy and numerical series. Main purpose of this part is to assess the constructive thinking rather than just content knowledge.

## **(2) Attitude towards Children:**

Attitude means “A settled way of thinking or feeling about something” (Oxford Dictionary). Tasleema and Mudasir (2012) are of view that as a profession, teaching demands such right type of persons who have strong aptitude and attitude for teaching which is bound with the success in future.

In education system the second main agent is student. Students are the persons basically for whom the whole efforts are taken place. If students’ role, needs and requirements will be ignored by the teacher then the system will be failed. In teaching profession children have great importance. How teacher has relation, feelings, behaviors, attitude toward children? Mahmet, Hassan and Melike (2009) are of the view that teacher’s attitude toward children is one of the important variable of teaching profession. This variable tells us that how much the teacher is satisfied and attached with his profession.

Teacher’s attitude is developed during his journey of becoming teacher which include his all institutions; schools, colleges, universities and especially his professional degree institution. Teacher’s attitude toward children affects not only his own behavior in



training classroom but also have strong affects his students in future. Jalal (2012) says there are many factors which influence the learning experiences and as well as selection and preparedness of the profession; two are main. One is aptitude which he considered as an internal factor and other is attitude which he is of view that is external factor. This shows that both aptitude as well as attitude has great importance in teaching profession. If a student teachers' have positive attitude towards children they can easily develop creative thinking, motivate their students, and can easily convey their verbal and non-verbal messages to the pupils ( Engin & Fatih, 2011). Chuan & Atputhasamy (2001) conducted a study in which respondents were attracted to the teaching profession because of love for children.

### **(3) Adaptability:**

Adaptability in teaching profession means the ability to manage and respond any new or uncertain change in teaching learning situation. Anwar et.al., (2012) articulated that “A successful teacher is one who adapts and adopts new practices that acknowledge both the art and science of learning” . Prospective teachers should have adaptability approach in their personality. It has been found a common problem with novice teachers that after appointment they couldn't cope with the changing demands of their job (Howard, 2000). It could be due to lack of aptitude towards teaching profession.

### **(4) Professional Information:**

In this scientific world opportunities are wider and accessible. It is a common fact that best selection is done after some information regarding choices. Same is the case in professional selection. Before going to join any profession one should have at least basic informations regarding that profession. It is also the dying need of the time because if a

person will join wrong profession, he will not only spoil his future and resources as well as the future of other persons which are related to that field and many other resources.

For teaching profession, there are two main types of trainings which provide professional information and knowledge. One is for the persons who are willing to join this profession and second is for those who are already part of it. First is pre-service teachers training which provide basic content and other pedagogical knowledge to the student teachers. Second one is in-service teacher training programs which equip in-service teachers with new and improved knowledge of teaching profession which is requirement for their continuous professional development. In the context of developing aptitude toward teaching as profession teacher training programs have significant role. For that reason the professional knowledge is a basic component of teaching aptitude. If a person has aptitude of teaching profession then he/ she should have at least basic information regarding this profession and will be eager to know latest information related to teaching profession.

#### **(5) Professional Interest.**

It is a common thought that someone who does not like the job cannot be successful in its profession. Interest is the one more important component of professional selection.

Ramzan et.al., (2013) conducted a study to know the motivational aspects of the prospective teachers of ADE and B.Ed in Gilgit Baltistan and found that prospective teachers have high level of intrinsic motivational level which is referred as love and affection towards students and interest in teaching profession. They also mention the

criteria for appointment of new teachers suggested by the World Bank that teachers should be appointed on the base of professional interest and knowledge. Anwar et al (2012) articulated that if a person is interested in profession then he have professional attitude, which means he has positive feelings, behaviors and commitment to that specific profession or job. Same is about the teachers that if he is committed and have positive attitude then it is sure that he will perform better.

Studies conducted by the Orl (2004) and Mahmet at.al., (2009) show that there were a significant difference between the attitudes of prospective teachers towards teaching as profession with respect to gender. Results of those studies indicated that female students have more interest in teaching profession than male teachers.

## **2.6. Teaching as Profession:**

Profession means combinations of such activities which are performed by the trained person according to the rules and regulations of that specific field. Same is in teaching. It is a profession which has certain components like teacher, student, learning process, learning material etc. and rules and regulations. Main agent of this profession is 'Teacher' who performs duties and follows the rules and regulations of teaching profession, for making this profession effective. According to Mahmet, at.al., (2009) "teaching is a profession which is composed of activities like starting, facilitating, directing and realizing the process of learning objectives and the person who performed these activities is known as teacher".

Mahmood, Akhter, Hussain & Azam (2013) used a term teaching as a "professional occupation"; if the teacher is devoted for its planning, conducting and

improvement. According to them “quality teacher must take it as a professional pursuit and as a process for facilitating learning references”

## **2.7. Teacher Education:**

According to Goods Dictionary “ Teacher education means all the formal and non-formal activities and experiences which help to qualify a person to assume responsibilities of a teacher professionally and to full fill his responsibilities effectively”. It is a program through which a person learns about the teaching process from pre-primary to higher education level through different learning materials, methods, research and training. It deals with the development of teacher proficiency and competencies that would empower and enable him to meet the set goals and requirements of teaching profession and knows how to tackle the problems and face the challenges of teaching profession throughout his career.

## **2.8. Teacher Education in Pakistan:**

It is accepted everywhere that education is like the backbone of development of the nation in all the social, economical and other aspects of life. It will be only effective if the teachers will play their role in proper ways and if the institutions and universities will play their part to produce productive teachers. Like many other developing countries Pakistan is also making changes in its educational sector to make it more effective. Basically there are three types of programs for teacher education in Pakistan. First is conventional program second is fields based training program (exist in northern areas only) and the last is distant education program. There are almost 227 government and 48 are private teacher training institutions, which are providing teacher education (Mushtaq & Kiyani , 2010).

In Pakistan Higher Education Commission (HEC) started Associate Diploma in Education (ADE) and Bachelor of Education (B.Ed) programs with the collaboration of USAID, Teacher Education Project and Provincial Departments. PTC, CT and other diplomas of teaching are replaced with these degrees. The curricula of these new teaching programs are based on new and interactive teaching approaches which are need of the time and of modern education system. It focuses that traditional teaching methodologies should be replaced by the required effective methods. As per teacher education qualification framework, the elementary colleges of education are responsible for preparing elementary teachers and colleges of education, faculty and department of education of public and private sectors universities are preparing secondary and higher school level teachers. However some selected institutions of teacher education are offering four years B.Ed and B.S- B.Ed program.

## **2.9. Significance of Aptitude in Teacher Education:**

This is the era of quality; quantity doesn't matter more than quality. Now the research is moving toward the quality of things. Same is in the education system. All the stake holders are interested in the quality of whole education system but how this is possible without the teacher's quality .Teachers' role in growth and civilization of a nation has great significance, who is the main agent of whole education system. There are many components as well as factors which affect the quality of teacher and teaching. Krishna (2012) highlighted three factors in his study regarding the quality of teachers namely "the change in curriculum of trainee teachers, the people having aptitude for teaching and the status of the job." These three factors play vital role to inculcate feelings

of commitment and satisfaction among teachers and thus help the society and as a result the students will become a productive citizen, who take pride in serving their nation.

Leigh & Ryan,(2006) wrote in their discussion paper that main component of educational system is 'Quality of teacher'. They further expressed Quality teacher is, who is good in point of view of students, work well with other colleagues , school staff, and who increased performance of the students in classroom. They investigated why teachers' aptitude toward teaching profession has changed and what is the role of pay in this concern? They referred it to more broadly as 'teacher's quality'. The use of teacher aptitude as an alternate for teacher quality has been validated in many studies, which have found a strong positive correlation between teacher's classroom performance and their own standardized test scores.

Nadeem. et.al., (2012) quoted the views of Bhatti (1987) that main agent of educational system is teacher and those educational standards which are available and followed by the professional teachers directly affect the quality of teachers and whole education system. Their knowledge, professional training, commitment, and teaching aptitude towards teaching profession have great significance. Khatal (2010) found in his study psychological correlates of teacher effectiveness are that the effective teachers have been found to possess higher aptitude for teaching than the non-effective teacher at the secondary level. Introductory and main aspect of quality and effective teaching is aptitude of teachers toward teaching profession (Nadeem et. al., 2012). It plays important part while developing professionalism in prospective teachers. During pre-service teacher training programs, like B.Ed trainees not only acquire expertise in micro skills, lesson planning and its execution but also need to develop the capacity to acquire proficiency

and a set of skills during the training course, as the very nature of aptitude shows that it is innate or acquired, constant or variable and unitary or pluralistic.

It is fact that there is no such equipment through which we can measure aptitude of any person for any profession. But empirical evidences show that we can judge an aptitude of a person through different tests and scales. It could be oral, written or in a practice ways. These instruments must have predictive value which helps us to know the success or failure of the person in a specific field or profession. On the bases of this fact we can say that for selecting student teachers for teacher education institutions, it is essential to have an aptitude test. These tests help in assuming that individuals are differ in their natural and special abilities. These differences could be useful in prediction of future achievement of the students in professional training and professionalism.

### **2.10. Teaching Aptitude and Career Selection:**

Teaching is important profession like many other professions. It is the mother of all other professions. Teacher is the person who inculcates knowledge of every profession with the use of different means and methods. Aptitude has vital role in profession. Marzluf (2004) articulated Quintilian's philosophy which shows the importance of aptitude in career or profession. According to him if we separated two nature and education, nature can accomplish without the help of education, but on the other hand education will not be significant without the support of nature. . He further exemplifies it with the raw material that nature is the raw material and education is art. First is form and second is formed with first. Both become valuable if work together. According to this philosophy without aptitude profession is only occupation. If a person has all the content knowledge but can't know how to deliver it according to the needs and requirements, and

through which best way then its knowledge will become not as effective as a person's having aptitude toward teaching. He could not be able to achieve the set targets and goals. According to Jalal (2012) aptitude and attitude are the main factors for the selection of career.

From the related literature review a teacher with good teaching aptitude must be aware of the following essentials of teaching profession e.g., lesson planning, students' motivation, curriculum, learning materials, teaching- learning methods and strategies, content knowledge, group activities, monitoring and evaluation, discipline, effective communication and interaction skills . In most of the time performance in past become best predictor of the performance in the future. Same case is in the teaching profession.

According to famous saying: "A poor teacher tells; a good teacher teaches; an excellent teacher demonstrates; an outstanding teacher motivates". Panday (2006) wrote that teaching profession is complex and demanding , so who are going to join it as a profession must know the importance of their choices and decisions. While choosing it as a profession many factors related to aptitude should kept in mind. As Ali.et al., (2013) found in their study that most of the subjects of their study selected teaching because their parents choose it for them. Especially female students, they were unable to get any other job. They joined this profession by chance or due to their family preferences. In other words it is known as teaching as occupation not as profession. Only few female respondents are in its favor because of its respect in society.

In module "Teaching as Profession" # 1, developed by Higher Education Commission(HEC) and National Academy for Higher Education (NAHE) fresh teachers



who joined this profession take 5 to 7 years to understand the chemistry of teaching profession, from them 30% leave it for good, only 70% stay in this profession for almost 30 years. The question arises at it that if we developed wonderful policies, plans, curriculum, schools, and take all other necessary actions to make the education system effective and leave the teachers as they are. Then will these efforts be as productive as we assume? Teacher is the person who will use these resources to get the quality output. Teachers' selection is the main part of this whole journey. There will be a great difference between the person who is joining teaching as profession and the one who will join it just as occupation or time pass. Yuksel-Sahin & Hotaman (2009) enlisted theories of selecting profession like Factor theory of occupational choice: in this theory the person studies the features of profession in detail. It became effective when the professional and persons' features go parallel. Second type is Holland's typological theory, in this type persons are divided in six groups with respect to their personality 'realistic, investigative, artistic, enterprising, social and conventional'. Third type of profession selection theory is 'decision theory'. According to this theory a person gathers all the information related to his/her interests and choices than review it in depth. At the end he /she make decision for his right choice.

In accordance with these theories of professional selection, for selecting teaching as profession the person should go through all these types. He needs to know detail of his personality, about the choices available, in depth needs and requirements of teaching profession as well and the decision making power, positive attitude for the teaching learning process.

### **2.11. Relationship of Aptitude with Academic Achievement:**

From last few decades there is a debate about the relationship of different factors which effect academic achievement of prospective teachers. From which one is aptitude. Literature shows there are different school of thoughts about the relationship of aptitude and academic achicvement of the prospective teachers.

Teaching aptitude tests help in prediction of level of achievement which is expected from the student teachers in professional life. It includes special abilities, talents, capacities, and interests which assume to indentify achievement level. Moreover evaluation, monitoring, tests, marks etc are the ways through which we can know the progress of the individuals. Results tell the command and effectiveness of individual in his/ her specific field. Same is the case in the education system, through different means we want to know the progress, strengths and weaknesses of the students. When we impart some sort of knowledge then we want to know about their achievement that what students achieve after the transfer of knowledge through training, course, semester in any specific period of time. When we talk about the teaching profession, it needs specific training before joining this profession like B.Ed. For effectiveness of education system, teacher should have full command over pedagogical knowledge, content knowledge, teaching and learning skills, students' psychology and needs, latest trends and issues. He or she should have strong academic background, mental abilities, communication skills, interest in profession, love with children etc. some qualities are related with the profession and some are related with the aptitude. Both types are part and parcel for the teacher education. Academic achievement is the baseline for the dcvelopmental path of education; it becomes a strong determinant of effective teaching (Ushakumari, 2008).

There are many factors those influence the performance of student teachers. Nasreen & Naz (2013) studied students' academic achievement and analyzed in their study, five kinds of factors i.e. Parental involvement, peer pressure, teacher's teaching style, socioeconomic status and motivation influence the academic achievement of prospective teachers. Study conducted by Nadeem et.al., (2012) articulated that primary school teacher's aptitude also influence motivation and achievement of students.

Mishra & Chincholikar,(2014) conducted a study of relationship of academic achievement with Aptitude, Attitude and Anxiety of M.Ed level student teachers and found that teaching aptitude and anxiety are the significant predictors of the academic achievement

Teacher, teacher education and prospective teacher, all are important aspects and burning issues since many years. This chapter looked at many important areas relevant to this study. Like concepts of aptitude, aptitude test, forms of aptitude tests, a professional teacher, teaching profession and relationship of professional aptitude and academic achievements of prospective teachers in Pakistani context.

According to the literature review entry level qualification fixed for the primary/ elementary teachers at grade 9<sup>th</sup> to 2<sup>nd</sup> year respectively is not up to the mark in Pakistan. Teachers are weak in subject matter knowledge .No special screening test related to teaching aptitude is conducted as many other professions like medicine, business management and engineering. These traditionally, particularly at primary level, low-entry level requirements created a general view of teaching as low status option, and for average and low academic record holders it is the safest and as well as part time profession of both genders. At the entry level qualification of teachers varies from

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province to province, having variations in the teacher's quality and uneven standards of measurements and assessments. As a developing country Pakistan is paying importance to education, in near future there will be a great demand for those teachers who are sincere, hardworking, and interested in teaching as a career and profession (Rehman, 2011).

According to Ramzan et.al., (2013) in Pakistan and many other developing countries people do not choose program or profession due to motivational aspects. Mostly they join programs and professions just for material gains and interests. Ali et.al., (2013) also found the same, according to their study prospective teachers have lack of commitment, motivation and positive attitude towards teaching profession and most of them just joined it as a last choice.

## CHAPTER 3

### METHODOLOGY

#### 3.1 Research Design:

The study was quantitative in nature. The co-relational research design was used to investigate the professional aptitude of prospective teachers and its relationship with their academic achievement. Because co-relational research study describes in quantitative terms the degree to which variables are related. (Gay, 2000)

#### 3.2 Population:

All the newly enrolled male and female prospective teachers (B.Ed students) of Fall 2014 and Spring 2015 in formal education system of public and private universities and degree awarding institution of Islamabad were the population of this study.

*Table 1 : Population*

Name of Institutions	Fall 2014	Spring 2015	Males	Females	Total
Preston University	9	10	5	14	19
NUML University	7	8	3	12	15
Federal Collage of Education	52	-	2	50	52
<b>Total</b>	<b>68</b>	<b>18</b>	<b>10</b>	<b>76</b>	<b>86</b>

Table No 1 shows that total population size was 86 from which 10 were males and 76 were females prospective teachers who were enrolled in B.Ed one year program.

**Table No 2: Demographic Information in Percentage**

<i>S.No</i>	<i>Gender</i>	<i>N</i>	<i>%</i>
1	<b>Male</b>	10	11.62
2	<b>Female</b>	76	88.37
	<b>Total</b>	86	100

Total 86 male and female students were enrolled in B.Ed program in session Fall (2014) and Spring (2015) in all the selected universities and institutions. 10 were males and 76 were females (Table No 1). Males were 11.62 % and females were 88.37 %. (Table No 2)

### **3.3 Sample and Sampling Technique:**

According to the table 1 and 2 total 86 male and female students were enrolled in B.Ed regular program in session Fall (2014) and Spring (2015) in all the selected universities and institution. 10 (11.62%) were male and 76(88.37%) were female. Universal sampling technique was used. It was not an inaccessible for data collection so entire population has been taken for the collection of data and results.

### **3.4 Instrumentation:**

Standardized tool “Teaching Aptitude Test Battery” (T A T B) developed and standardized by Singh and Sharma (2011) was adapted for the data collection after making it cultural free tool with the help of experts’ opinions. Especially all the proper

nouns not related to Pakistani Culture (names of the special persons, place and things) used in the items were changed by the researcher with the help of educational experts. Before administrating the tool ethical considerations were followed by the researcher.

First part of the tool was profile sheet which was comprised of basic demographic information. Gender was only used as a variable for analysis and the second part was comprised of five test batteries. First part was named as 'mental ability'. It consisted of three types of MCQs about verbal reasoning, analogy and word problems. Basic purpose of this part was to evaluate the prospective teachers' ability to generalization, abstract, and constructive thinking, which were required to teach at elementary and secondary level.

Second part of the test named as 'attitude towards children' was related to the teaching profession directly. It assessed prospective teachers' attitude toward students, who are the main component of teaching learning process. This part was comprised of statements on 5 point Likert scale. Next part was 'adaptability'. It was to know how prospective teachers will behave according to the situation in teaching profession. It was comprised of MCQs, wherein prospective teachers had to choose right suggestions. Last two parts were professional information and interest in profession. These included MCQs which were totally related with teaching profession.

### **3.5 Validity:**

Prior the scores on total test were validated against rating of the instruction of the teacher training institutions. Product moment coefficient of co-relation was calculated between scores- obtained on the test and the position of the trainees given by the

instructors. The value of the coefficient of co-relation was found to be 0.421 with the probably error of +0.026.

Before administration in Pakistani Context, experts' opinions (in the field of education) were used to validate the tool. According to the need of the study, experts pointed that the tool is lengthy. In the light of experts' suggestions and rating, it was shortened. By keeping in view the objectives of the study few items were discarded and few items were included especially in the last part of the test. In the light of their suggestions the tool was adapted, in this way the validity of the tool was assured by the researcher for the effective results of the study.

### 3.6 Reliability

Reliability of the test was already examined by the three different methods, namely split half method, test retest method and K-R method. Table # 3 shows the reliability co-efficient of the test by different methods.

*Table 3: Reliability Co-efficient*

Method	N	Reliability co-efficient	PRr
Split half method	1000	0.98	0.002
Test retest method	1000	0.97	0.004
K.R. Method	1000	0.89	-

Split half reliability method was used for the adapted tool. Since reliability is the most essential for this study also so it was assured by the pilot testing of the adapted tool. Those who were included in pilot testing were not from the selected sample of the study.



For the calculation of split-half reliability co-efficient; Spearman Brown's Prophecy formula has been used. Results showed the co-efficient of correlation .86 shown in Table # 4. It revealed that the adapted aptitude test battery highly reliable.

**Table 4: Reliability of the Whole Test by Split Half Method**

Method	Spearman Brown's co-efficient
Split Half Method	.86

### 3.7 Data collection

The data were collected in two phases, firstly for knowing the level of Teaching Aptitude of prospective teachers, Teacher Aptitude Test Battery (T A T B) developed and standardized by Singh and Sharma was adapted and administered to the selected sample. The data were collected in first two weeks of semester Fall (2014) and then in first two weeks of Spring (2015), when the actual classes started because the aptitude should be measured before the training. Data were collected by the researcher herself. Second phase was to know the academic achievement of prospective teachers, for this purpose result of midterm exams of selected sample of B.Ed students were obtained from the record of selected universities and institutions.

### 3.8 Scoring:

Scoring of the aptitude test was done with the help of scoring key and instructions given in the manual of the tool. It provides raw data in the form of marks obtained by each prospective teacher. And then all the makes were converted in percentage. For

academic achievement midterm result was collected from all the selected institutions and then marks will be converted in percentage form.

### **3.9 Data Analysis**

For the interpretations of the collected raw data and to know the answers of stated research questions; data analysis is the essential part. The data were analyzed by the use of software SPSS. The scoring key and instructions were kept in mind during data analysis. Statistical analysis namely mean and co-efficient of correlation was used to know the answers of the framed research questions and hypothesis.

## CHAPTER 4

### ANALYSIS AND INTERPRETATION OF DATA

After the collection of data according to the plan and procedure the important issue that concerns the researcher is to assess the raw data through the proper use of appropriate statistical techniques. This analysis and interpretation help to assess the specific objectives and research questions of the study. In order to find out the results of this study data were analyzed with the help of SPSS (20).

To find out the detail results of the study, analysis was divided into three main steps. First was related to the aptitude of the prospective teachers towards teaching as profession. For this purpose mean were calculated. These values were also used to find out the difference between professional aptitude of male and female prospective teachers. Next part was to know the academic achievement of the prospective teachers and gender wise difference of their academic achievement. Again mean were applied. Third step was to find out the relationship of both variables; teaching aptitude and academic achievement. For this purpose Pearson r was applied to find out the coefficient of population co-relation. Whole analysis was done with the use of SPSS (20).

Marks of the aptitude test and midterm exams were converted into percentage and then interpreted according to the table no5 and table no 6.

**Table No 5: Norms for Interpretation of Teaching Aptitude Test Scores**

<b>S.No</b>	<b>Aptitude Test Scores in %</b>	<b>Interpretation</b>
1	50 and below	Low
2	51-60	Average
3	61-70	High
4	71-80	Above Average
5	81 and above	Excellent

Norms given in Table no 5 were used to interpret the level of teaching aptitude of prospective teachers. Marks obtained in teaching aptitude test were converted into percentage and then five levels were used for interpretation of data related to teaching aptitude of prospective teachers.

**Table No 6: Norms for Interpretation of Academic Achievement of Prospective Teacher**

<b>S.No</b>	<b>Academic Achievement in %</b>	<b>Interpretation</b>
1	50 and below	Low
2	51-60	Average
3	61-70	High
4	71-80	Above Average
5	81 and above	Excellent

Norms shown in Table no 6 were followed in the study for the interpretation of the level of academic achievement of prospective teachers. Marks of midterm exams were obtained and then converted into percentage.

**Table No 7: Teaching Aptitude of Prospective Teachers for Teaching as Profession**

<i>Variable</i>	<i>N</i>	<i>M</i>	<i>Interpretation</i>
Teaching Aptitude	86	59.60	Average

The mean value of Aptitude of prospective teachers towards teaching as profession was 59.60 (table No 7). According to the norms of Aptitude test (Table No 5), prospective teachers have average level of teaching aptitude.

**Table No 8: Dimension Wise Teaching Aptitude of Prospective Teachers**

<i>Dimensions</i>	<i>N</i>	<i>M</i>	<i>Interpretation</i>
Mental Ability	86	21.41	Low
Attitude towards children	86	71.62	Above Average
Adaptability	86	55.81	Average
Professional Information	86	78.81	Above Average
Interest in Profession	86	64.88	High

Table no 8 gives detail of dimension wise teaching aptitude of prospective teachers. Result of first dimension namely Mental Ability (M =21.41) was low, attitude towards children (M= 71.62) was Above Average, (M=55.81) of Adaptability revealed Average level of teaching aptitude, Professional Information (M=78.81) was Above

Average and the in last dimension Interest in Profession (M=64.88) prospective teachers have high level of professional aptitude.

**Table No 9: Gender Wise Teaching Aptitude of Prospective Teachers**

<i>Variable</i>	<i>Gender</i>	<i>N</i>	<i>M</i>
<b>Teaching Aptitude</b>	<b>Male</b>	10	63.07
	<b>Female</b>	76	59.14

Mean was calculated to examine the gender difference in professional aptitude of prospective teachers. Results (Table no 9) indicated that the level of teaching aptitude of male prospective teachers (M=63.07) was significantly higher than the professional aptitude of female prospective teachers (M=59.14). Thus it revealed that there is a significant difference between teaching aptitude of prospective teachers towards teaching as profession with respect to gender.

**Table 10: Dimension Wise Teaching Aptitude of Male and Female Prospective Teachers**

<i>Dimensions</i>	<i>Gender</i>	<i>M</i>
<b>Mental Ability</b>	Male	20.83
	Female	21.49
<b>Attitude towards Children</b>	Male	70.30
	Female	71.80
<b>Adaptability</b>	Male	60.62
	Female	55.18
<b>Professional Information</b>	Male	87.22
	Female	77.70
<b>Interest in Profession</b>	Male	67.00
	Female	64.60

Mean shown in table no 10 gave the in depth gender wise differences on all five dimensions of teaching aptitude test. Male prospective teachers (M=20.83) had lower scores than female (M=21.49) prospective teachers on 'Mental Ability'. According to the values on 'Attitude towards Children' females (M=71.80) have higher level of attitude towards children than males (M=70.30). In third dimension namely 'Adaptability' males have higher values (M=60.62) than females (M=55.18). Difference in 'Professional Information' shows that males (M=87.22) have higher level of professional information

than female (M=77.70), In 'Interest in Profession' Males (M=67.00) also have higher scores than female (M=64.60) prospective teachers.

**Table No 11: Academic Achievement of Prospective Teachers**

<i>Variable</i>	<i>N</i>	<i>M</i>	<i>Interpretation</i>
<b>Academic Achievement</b>	86	71.28	Above Average

To find out the level of Academic Achievement of prospective teachers the result of Midterm exams were obtained from the departments of selected universities and institution. Then marks of each student were converted into percentage. Mean was applied and results (M=71.28) revealed that prospective teachers had Above Average level of Academic achievement. (Table N 11)

**Table No 12: Gender Wise Academic Achievement of Prospective Teachers**

<i>Variables</i>	<i>Gender</i>	<i>N</i>	<i>M</i>
<b>Academic Achievement</b>	Male	10	72.04
	Female	76	71.18

In table no 12 gender wise Academic achievement of prospective teachers was shown. Males (M=72.4) had slightly higher Academic achievement than the Female (M=71.18) prospective teachers.



**Table No 13: Relationship between Teaching Aptitude of Prospective Teachers and their Academic Achievement**

<i>Variable</i>	<i>N</i>	<i>Coefficient of Co-relation (<math>\rho</math>)</i>	<i>P- value</i>	<i>Interpretation</i>
<b>Teaching Aptitude &amp; Academic Achievement</b>	86	.02	.79	No significant relationship

To find out the relationship of teaching aptitude of prospective teachers towards teaching as profession with their academic achievement Pearson r was applied. The coefficient of population co-relation showed the level of relationship. According to the table No 13 there is no significant relationship between teaching aptitude and academic achievement,  $\rho (84) = .02$ ,  $p = .79$  of prospective teachers. So the null hypothesis was accepted.

**Table 14: Dimension Wise Relationship of Teaching Aptitude and Academic**

**Achievement**

<b>Dimensions of Aptitude test</b>	<b>Coefficient of co-relation (<math>\rho</math>)</b>	<b>P-value</b>	<b>Interpretation</b>
<b>Mental Ability</b>	.13	.21	No relationship
<b>Attitude towards Children</b>	-.02	.85	No relationship
<b>Adaptability</b>	.00	.93	No relationship
<b>Professional Information</b>	-.01	.86	No relationship
<b>Interest in Profession</b>	.06	.56	No relationship

Dimension wise relationship of professional aptitude and academic achievement of prospective teachers is clear from table # 14. Pearson r was used to calculate the coefficient of co-relation separately for all the five dimensions of teaching aptitude test battery. All the  $\rho$ -values were near to 0.00. Mental ability ( $\rho = .13$ ,  $p = .21$ ) Attitude towards children ( $\rho = -.02$ ,  $p = .85$ ), adaptability ( $\rho = .00$ ,  $p = .93$ ), professional information ( $\rho = -.01$ ,  $p = .86$ ) and interest in profession ( $\rho = .06$ ,  $p = .56$ ) indicated that dimension wise there is no significant relationship between teaching aptitude of prospective teachers for teaching as profession with their academic achievement. So the null hypothesis was accepted.

## CHAPTER 5

### SUMMARY, FINDINGS, CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

#### 5.1 Summary:

The study was to explore the aptitude of prospective teachers for teaching as profession and its relationship with their academic achievement. The study was quantitative in nature. The co-relational research design was used to investigate the professional aptitude of prospective teachers and its relationship with their academic achievement.

All the male and female prospective teachers (B.Ed students of formal programs) of Fall (2014) and Spring (2015) of public and private universities and degree awarding institutions of Islamabad were the population of this study. Universal sampling technique was used because it was not an inaccessible population for this research study. Standardized tool "Teaching Aptitude Test Battery (T A T B)" developed and standardized by Singh and Sharma (2011) was adapted for the data collection. Validity of the tool was assured by the experts' opinions and suggestions and reliability was assured with split half method and pilot testing. Tool was administered by the researcher in the first week of both selected semesters, and to know the academic achievement midterm results were collected from the departments of the selected universities and institutions. For the analysis of data SPSS was used. To find out the teaching aptitude and academic achievement of prospective teachers mean was applied. Gender differences were found

on the bases of calculated mean. At the end to know the co-relation co-efficient of population Pearson ( $\rho$ ) was administered by using SPSS (20).

## **5.2. Findings:**

On the basis of data analysis following are the findings of the study:-

1. Mean of teaching aptitude of prospective teachers is 59.60 (Table No 7). According to the norms of teaching aptitude (Table No 5) it comes in the range of 51-60. Thus results revealed that prospective teachers had average level professional aptitude.
2. Mean 21.41 (Table No 8) of first test battery, named as 'Mental Ability' showed that prospective teachers have low mental abilities.
3. Second dimension had direct relation with the teaching learning process. Prospective teachers have above average result ( $M=71.26$ ) in this test battery namely 'Attitude towards children. (Table No 8)
4. According to the table no 8 Mean = 55.81 of 'Adaptability' revealed that prospective teachers have average level of professional aptitude.
5. 'Professional Information' was directly related with the teaching profession. Prospective teachers ( $M=78.81$ ) have above average level of professional aptitude. (Table No 8).
6. The last dimension 'Interest in Profession' ( $M=64.88$ ) showed high level of aptitude of prospective teachers towards teaching as profession. (Table No 8)

7. Results about gender wise differences indicated that male prospective teachers (N=10) have higher teaching aptitude (M= 63.07) than female (N=76) prospective teachers (M=59.14). (Table No 9)

8. Male prospective teachers (M=20.83) have lower scores than female (M=21.49) prospective teachers, which indicated that female prospective teachers have slightly higher teaching aptitude in first test battery of namely 'Mental Ability'. (Table No 10)

9. In 'Attitude Towards children' male (M=70.30) had slightly lower mean than female prospective teachers (M=71.80). (Table No 10)

10. In third dimension namely 'Adaptability' Mean value 60.62 of male prospective teachers was higher than the Mean value 55.18 of female. It showed that gender wise male prospective teachers have higher aptitude towards teaching as profession.(Table No10).

11. Male prospective teachers (M=87.22) have higher values than the female prospective teachers (M=77.70), which showed that statistically gender wise male have more professional than female. (Table No 10)

12. Male (M=67.00) have higher mean values than female (M=64.60). It is clear from (Table No 10) that male have high interest level in teaching profession with respect to gender.

13. According to the norms (Table No 6) of academic achievement, results  $M=71.28$  (Table No 11) revealed that prospective teachers have above average level of academic achievement.

14. Table no 12 clears that male prospective teachers ( $M=72.4$ ) have slightly higher academic achievement than the female prospective teachers ( $M=71.18$ ).

15. The co-efficient of co-relation showed the level of relationship between the teaching aptitude of prospective teachers for teaching as profession with their academic achievement. According to the table no 13 there is no significant relationship between teaching aptitude and academic achievement  $\rho(84) = .02$ ,  $p = .79$  of prospective teachers therefore null hypothesis is accepted.

16. Dimension wise relationship of professional aptitude and academic achievement of prospective teachers is clear from table 14. Pearson  $r$  was used to calculate the co-efficient of co-relation separately for all the five dimensions of teaching aptitude test battery. All the  $\rho$ -values were near to 0.00 which indicated that no single dimension has relationship with academic achievement of prospective teachers. (Table No 14) Hence null hypothesis is accepted.

17. 'Mental ability' had ( $\rho = .13$ ,  $p = .21$ ), it shows there is no significant relationship between teaching aptitude of prospective teachers for teaching as profession and their academic achievement. (Table No 14)

18. Co-efficient of co-relation ( $\rho$ )-.02, with significance value .85 of second dimension namely 'Attitude towards children' shows there is no significant relationship between

teaching aptitude of prospective teachers for teaching as profession and their academic achievement. (Table No 14)

19. According to the table no 14 ( $\rho = .00$ ,  $p = .93$ ). It is clear that there is no significant relationship between teaching aptitude of prospective teachers towards teaching as profession and their academic achievement on 'Adaptability'.

20. Professional information ( $\rho = -.01$ ,  $p = .86$ ) and academic achievement of prospective teachers had no significant relationship. (Table No 14)

21. Co-efficient of co-relation of interest in profession ( $\rho = .06$ ,  $p = .56$ ) indicated that there is no significant relationship between teaching aptitude of prospective teachers for teaching as profession with their academic achievement. (Table No 14)

### **5.3. Conclusions:**

On the basis of findings following conclusions were drawn about the aptitude of prospective teachers for teaching as profession and its relationship with their academic achievement:

1. Prospective teachers who were enrolled in one year B.Ed program of session fall 2014 and spring 2015 of selected universities and degree awarding institutions have average level of aptitude for teaching as profession. ( Finding No 1)
2. It was concluded that in first sub test which was comprised of items directly related to the general mental abilities of prospective teachers, B.Ed students have

low level of result which was part and parcel to teach in elementary and secondary level. (Finding No 2)

3. Regarding the prospective teachers attitude towards children it was concluded that they have above average level of attitude towards children. (Finding No 3)
4. It was concluded that B.Ed students have average level of result in 'adaptability'. (Finding No 4)
5. According to the norms of test it was concluded that Prospective teachers have above average level of information about teaching profession. (Finding No 5)
6. From the results of the last dimension of teaching aptitude test it was concluded that prospective teachers have high level of interest in profession. (Finding No 6)
7. With respect to gender it was concluded that male prospective teachers have high aptitude for teaching as profession than female prospective teachers. (Finding No7)
8. According to the finding no 8 it was concluded that male prospective teachers have lower mental abilities than female prospective teachers.
9. Finding No 9 shows that female prospective teachers have slightly higher attitude towards children than male prospective teachers.
10. It was concluded from finding No 10 that male have higher adaptability than female prospective teachers.
11. Males have higher level of professional information than female prospective teachers. (Finding No 11)
12. It was concluded that male prospective teachers have more interest in profession than female prospective teachers. (Finding No 12)



13. According to the results it was concluded that prospective teachers have above average level of academic achievement. (Finding No 13)
14. With respect to gender, male prospective teachers have higher academic achievement than female prospective teachers. (Finding No 14)
15. About the relationship of aptitude of prospective teachers for teaching as profession and their academic achievement it was concluded that there was no significant relation between these two variables. (Finding No 15)
16. All the dimensions were analyzed independently and each dimension of teaching aptitude had  $p$ -values near to 0.00 (Table No 14) which indicated that no single dimension has relationship with academic achievement of prospective teachers. (Finding No 16)

#### **5.4. Discussion:**

The research study was aimed to explore the relationship of aptitude of prospective teachers (B.Ed students) for teaching as profession and their academic achievement. For this purpose data were collected from the fresh students of selected institutions and universities who were enrolled in one year B.Ed program. The results of the study need to be discussed and relate it to the findings of the previous researches. According to the literature review few findings are in accordance with the previous findings and some of the findings of this research are surprisingly contradictory to the previous research studies.

It was found that prospective teachers who were enrolled in one year B:Ed program of session fall of 2014 and spring of 2015 of selected universities and degree awarding

institutions have average level of teaching aptitude for teaching as profession, this result is same like Mehmood et.al (2013), Ali,et.al (2013).

Dimension wise results indicated that prospective teachers have low aptitude level in mental ability, above average in attitude towards children, average level in adaptability, above average level in teaching information, and had high level in interest in profession.

In this study male have higher level of teaching aptitude then female prospective teachers, which could be due to unequal ratio of male and female students in regular program of B.Ed, ratio of male students were less then female students. This could be the limitation for the generalization of the findings and results of the study.

When academic achievement of prospective teachers was analyzed, it was found that they have above average level of academic achievement. With respect to gender males have higher academic achievement then female prospective teachers.

Professional aptitude of prospective teachers has no significant relationship with academic achievement. Mishra & Chincholikar (2014) found opposite result .They found positive relationship of teaching aptitude with academic achievement of student teachers. Literature review indicated that there are many other factors those influence the performance of student teachers. It could be possible that academic achievement of prospective teachers have relationship with these factors which were studied by Nasreen & Naz (2013) in their study “factors affecting academic achievement of prospective teachers” and analyzed, five kinds of factors i.e., Parental involvement, peer pressure, teacher’s teaching style, socioeconomic status and motivation influence the academic achievement of prospective teachers.

Dimension wise results of each dimension of teaching aptitude test showed that they had no relationship with the academic achievement of prospective teachers. But Mahmet et.al (2009) found in their study that teachers' attachment with the subject and students had positive correlation. Ramzan et.al (2013) conducted a study to know the motivational aspects of the prospective teachers of ADE and B.Ed in Gilgit Baltistan and found that prospective teachers have high level of intrinsic motivational level which is referred as love and affection towards students and interest in teaching profession. The use of teacher aptitude as an alternate for teacher quality has been validated in many studies, which have found a strong positive correlation between teacher's classroom performance and their own standardized test scores. Studies conducted by the Oral (2004) and Mahmet at.al (2009) show that there were a significant difference between the attitudes of prospective teachers towards teaching as profession with respect to gender. Results of those studies indicated that female students have more interest in teaching profession than male teachers. Nadeem et.al (2012) quoted the views of Bhatti that main agent of educational system is teacher and those educational standards which are available and followed by the professional teachers directly affect the quality of teachers and whole education system. Their knowledge, professional training, commitment, and teaching aptitude towards teaching profession have great significance. Khatal (2010) found in his study psychological correlates of teacher effectiveness are that the effective teachers have been found to possess higher aptitude for teaching than the non-effective teacher at the secondary level. Introductory and main aspect of quality and effective teaching is aptitude of teachers toward teaching profession. Ali.et.al. (2013) found in their study that most of the subjects of their study selected teaching because their parents choose it for

them. Especially female students, they were unable to get any other job. They joined this profession by chance or due to their family preferences. According to Ramzan et.al (2013) in Pakistan and many other developing countries people do not choose program or profession due to motivational aspects. Mostly they join programs and professions just for material gains and interests. Ali et.al (2013) also found the same, according to their study prospective teachers have lack of commitment, motivation and positive attitude towards teaching profession and most of the just joined it as a last choice. In other words it could be said that they join teaching as occupation not as profession.

It is concluded that aptitude of prospective teachers have importance and significance in admissions procedure of teacher training institutions. Few studies indicated positive relation, few studies indicated no relation. But no single study showed negative relationship of both variables. This study showed no relationship of aptitude towards teaching as profession and academic achievement of prospective teachers. But independently both variables have average and above average results. Future research studies may include comparison of the results of this study against a larger sample size and proper ratio of both genders. Other variables could be added to examine the impact of teaching aptitude on the performance of prospective teachers and for their professional development.

## **5.5 Recommendations:**

### **i) Specific Recommendations:**

In teaching profession clear set of goals, good managerial skills good teaching aptitude, devotion and dedication towards profession is required. Teacher should be given

a value as integral stakeholder of the whole education system. It means that teachers should be treated as an important agent in educational planning and respectable professionals. In the light of this study following are specific recommendations:

1. According to the demographic information of this study male ratio of the prospective teachers are not satisfactory in regular B:Ed programs. So the study may be conducted to know that why male ratio is less than female in regular programs of teacher training and how male students will come in these programs.
2. According to the finding prospective teachers have average level of professional aptitude, it is recommended to make such plans and policies for B.Ed which increases the level of teaching aptitude during the degree program.
3. Results about 'mental ability' may be increased by introducing such subjects which are directly related to the logical and mathematical thinking.
4. According to the findings female prospective teachers have low professional aptitude. To increase the teaching aptitude of female prospective teachers' higher authorities may make this profession more attractive and respectable like medicine, engineering etc. for example through conducting seminars, giving incentives, scholarships, guiding and counseling, increasing market demand and jobs.
5. Male prospective teachers have low attitude towards children. So it is recommended to choose such male students who have some knowledge of child psychology. Their affection, interest and attitude towards children may be main components at the time of admission. Child psychology and its practical examples may be compulsory in all teacher training programs.

6. Guidance and counseling maybe provided to the students at every level for the better selection of their subjects as well as profession according to their aptitude, attitude and interest.

**ii) Recommendations for future researchers:**

Following are the suggested recommendations for future researchers related to this study for the improvement of prospective teachers' trainings:

1. The study may be replicated with the same variables in larger sample size.
2. It may be worthwhile to replicate the study on a sample consisting of those prospective teachers who are doing B.Ed from private universities and degree awarding institutions.
3. Results about Mental Abilities are poor in this study. So it is recommended to conduct a study to find out the reasons behind it and problems of prospective teachers regarding this dimension of teaching aptitude test.
4. In order to validate the results of this study, it may be replicated by assessing the prospective teachers' aptitude for teaching as profession with the use of any other standardized or self developed tool.
5. For deep analysis about teaching aptitude of prospective teachers towards teaching as profession some other variables related to teaching aptitude may be examined.
6. Universities and institutional administrators, educationists and other higher authorities need to pay closer attention towards prospective teachers' standardized selection process. Standardized procedure of teacher training admission and recruitment in jobs may be introduced.

7. Such other factors which are responsible for satisfaction and dissatisfaction of prospective teacher and other students to choose teaching as a profession are recommended to study.
8. All the policy makers and other governing bodies should pay attention to make teaching more prestigious and attractive profession to encourage the students and their parents as well towards teaching not as occupation but as a profession.

## REFERENCES:

- Academy for Educational Development. (2005). *Directory of Teacher Educational /training Institutions in Pakistan*. USAID/ Pakistan Teacher Education and Professional Development Project)
- Academy of Educational Planning and Management. (2009). *Pakistan Education Statistics 2008-2009*. Retrieved on April 22,2011 from: <http://www.moe.gov.pk>
- Ali, T. (2011). Understanding how practices of teacher education in Pakistan compare with the popular theories and theories and narrative of reform of teacher education in international context. *Aga Khan University, Institute for Educational Development, Karachi*
- Ali, A., Zeb, A., & Amina, S. M. (2013). Factors Associated with Selecting Teaching as a Profession, *PUTAJ – Humanities and Social Sciences*, 20, 2013, Retrieved from [putaj.org/index.php/humanities/article/view/340/66](http://putaj.org/index.php/humanities/article/view/340/66), on 25th march 2014
- Anwer, M., Tahssen, T., & Batool, S. (2012). Professional Role of Teachers in Government Colleges and Higher Secondary Schools for F.SC Programme in Punjab: A comparative Study. *Social Sciences and humanities*, 3(3). Retrieved from [www.journals.savap.org.pk](http://www.journals.savap.org.pk). on 11 November 2014
- Beena, S. (1995). *Determinants of Teacher Effectiveness*. Ambala Cantt, The India Publications.
- Bhatti, M. A. (1987). *Primary Education Improvement*. National Education Council: Islamabad.



- Bingham, W. V. (1948). *Aptitudes and Aptitude of teaching*. New York: Harper and Brothers Publishers.
- Brewer, M. (2000). Research Design and Issues of Validity. In Reis, H. & Judd, C. (Eds.), *Handbook of Research Methods in Social and Personality Psychology*. Cambridge: Cambridge University Press.
- Cambridge Advanced Learner's Dictionary & Thesaurus. Cambridge University Press.  
Retrieved from <http://dictionary.cambridge.org/dictionary/british/aptitude> on 20th May 2014
- Canel, A. (2007). *The place and importance of Guidance services in Education*. Rehberlik. Ankara, Turkey. 117-151.
- Chuan, G. K., & Atputhasamy, L. (2001). *Teacher education in Singapore: What motivates students to choose teaching as career?* Paper presented at the International Educational Research Conference, University of Notre Dame, Western Australia, 2-6.
- Darling-Harmond, L. (1998). Teacher learning that supports student learning. *Educational Leadership*, 55(5), 6-11.
- Dewey, J. (Ed.) (1964). *John Dewey on Education: Selected writing*: Chicago: University of Chicago Press.
- Ekstorm, R. B. (1974). *Teacher Aptitude and cognitive Style; their relation to pupil performance*, ED 100496 .ERIC

- Engin, A., & Faith, K. (2011). The Investigation of Secondary School Science and Mathematics Pre-Service Teachers' attitudes towards Teaching Profession. *Educational Research and Review*, 6(6), 489-496.
- Gay, L. R. (2000). *Educational Research. Competencies for Analysis and Application*, (5<sup>th</sup> ed) .Naional Book Foundation Islamabad.
- Hansen-Powell, P. (2007). Constructing knowledge. *Connect Magazine*, 20 (3), 1-4.
- Howard, B. (2000). The Experience of Constructivism Transformation Teacher Epistemology. *Journal of Computing in Education*. 32(4), 455.
- Hussain, S., Ali, R., Khan, M. S., Ramzan, M., & Qadeer, M. Z. (2011). Attitude of Secondary School Teachers towards Teaching Profession. *International Journal of Academic*. 3(1), 985-990.
- Irfan, A. M., Rashid, A., Samina, S. T., & Akhter, M. (2012). Personality and Teaching: An Investigation into Prospective Teachers' Personality. *International Journal of Humanities and Social Science*. 2(17), 161-171.
- Iqbal, M. & Irfan, A. M. (2011). Globalization and Paradigm Changes in Teacher Education: Revolutionizing Teaching Learning Process at School Level in Pakistan. *International Education Studies*. 4(4). 99-110.
- Irfan, A. M. & Hussain, M. (n.d.). The Professional Competencies of Prospective Teachers at Teacher Education Programs at Distance Education in Pakistan: An Investigation retrieved from <http://www.cd.aaou2013.com/pdf/85.pdf> on 14th march 2014

- Jalal, G. Y. (2012). The Role of Aptitude and Attitude in Career Building, *Abasyn Journal of Social Sciences*, 3(1).
- Kant, R. (2011). A Study of Teaching Aptitude and Responsibility Feeling of Secondary School Teachers in Relation to their Sex and Locale , *Academic Research International*. 1(1), 2011.
- Kakkar, S. B. (1970). Influence of teacher training on trainees attitudes. *Indian Education Review*, 5(1), 106 – 103.
- Kohhar, S. k. (2006). *Educational and Vocational Guidance in Secondary schools*. Sterling Publishers Pvt. Ltd, retrieved from <http://books.google.com.pk/books?id=yCzdXNSeU0C&pg=PA355&dq=tools+developed+by+R.P.+Singh+and+S.N.+Sharma&hl=en&sa=X&ei=hszrUursGbSV7Abf1oCYBw&ved=0CCoQ6AEwAA#v=onepage&q=tools%20developed%20by%20R.P.%20Singh%20and%20S.N.%20Sharma&f=false> on 12th march 2014
- Kanti, S. K. (2013). A study of the Relationship between Teacher Attitude & Teaching Aptitude of Prospective Secondary School Teachers. *International Journal of Education and Psychological Research*, 2(4), 95-98.
- Krishna, S. M. (2012). A Study Teaching Aptitude and Liability feeling of Middle Class teachers of Khargone (M.P.) to Sex, Locale & Caste. *International Journal of Scientific & Engineering Research*, 3(12), 1-21.

- Khatal, M. N. (2010). Psychological Correlates of Teacher Effectiveness. *International Referred Research Journal*, 2(20).
- Leigh, A. & Ryan, C. (2006). *How and Why has Teacher Quality Changed in Australia?* Discussion Paper 534, Center for Economic Policy Research, The Australian National University.
- Mahmet., Hassan., & Melike. (2009). The Attitude of Prospective Teachers towards the Profession of Teaching, *Education and Science*. 34(151).
- Marzluf, P. P. (2004). Source Aptitude or Experience? Isocratic Ambivalence and the Ethics of Composition: *Rhetoric Review*, 23(4), 293-31. Retrieved from <http://www.aupc.info/volume-3-issue-1/> on 25<sup>th</sup> march2014.
- Martin, D. S., Craft, A. R., & Tillema, H. H. (2002). Developing critical and creative thinking strategies in primary school pupils: an inter-cultural study of teacher's learning. *Journal of In-Service Education*, 28(1), 115-134.
- Ushakumari, M. B. (2008). *Relationship of Teacher Aptitude with Academic Achievement and Certain Psychological Variables of Primary Teacher Trainees of Kerala*. (Ph.D .Thesis) University of Calicut.
- Mehmood, T., Akhter, M., Hussain, A. C., & Azam, R. (2013). Attitude of Prospective Teachers toward Profession, A Measure for Institutional Development. *International Journal of Asian Social Science*, 3(11), 2363-2374.
- Ministry of Education. (2001). *National Plan of Action on Education for All*. 2000-2015 Pakistan. Islamabad.

- Mishra, S. G., & Chincholikar, K. L. (2014). A Study of Relationship of Academic Achievement with Aptitude , Attitude and Anxiety. *International Journal of English Language, Literature and Humanities*. 22(1).
- Mushtaq, M., & Munir, K. M. (2010). The Changes and Challenges of Secondary Level Teacher Education in Pakistan: A Training Perspective. *International Journal of Academic Research in Business and Social Sciences*. 3(12).
- Nadeem, M. A., Naz, A., Haq. R., & Bibi, C. (2012). An Examination of Teaching Aptitude of Teachers Working at Primary Level: Demographic differences, *International Interdisciplinary Journal of Education*, 1(2).
- Nasreen, A., & Naz, A. (2013). A Study of Factors Effecting Academic Achievement of Prospective Teachers, *Journal of Social Science for Policy Implications*, 1(1), 23-3.
- Oral, B. (2004). Faculty of Education Students' Attitudes to Teaching Profession. *Edus.Res.*, 15:88-98.
- Oxford Dictionary, Retrieved from <http://www.oxforddictionaries.com/definition/english/attitude> on 21st April 2014.
- Panday, L. K. (2006). Teaching as a Profession. *G.S Rawat. India*, 183.
- Rehman. (2011). Teaching jobs in Pakistan: career in teaching.

- Ramzan, M., Iqbal, J., & Khan, A. (2013). Motivation of Prospective Teachers in Associate Degree in Education (ADE) and B.Ed (Hons) Elementary Programs in Gilgit-Baltistan, *Bulletin of Education and Research* . 35(2), (special Issue), 55-73.
- Reddy, B. (1991). *A Study on Teaching aptitude and Attitude of Secondary School Teachers in Andhra Pradesh*, unpublished Ph.D. thesis in education, Osmania University.
- Rationalization of pre-service teacher education programs in Pakistan. (2010) pre-STEP, USAID/ Pakistan.
- Sajan, K. S. (2010). *Teaching Aptitude of Student Teachers and Their Academic Achievements at Graduate Level*. Retrieved from files.eric.ed.gov/fulltext/ED508977.pdf on 15<sup>th</sup> February, 2014.
- Singh, R. P., & Sharma, S. N. (1998). Teaching Aptitude Test Battery. *National psychological corporation*, Agra (UP), India.
- Sharma, R. A. (1971). *A Study of Relationship of Predictors of Teacher Effectiveness at Elementary Level and follow up after One Year of Training*. Unpublished doctoral dissertation. Edu.
- Singh, I. M. (1987). *A comparative study of creative and non-creative B.Ed. pupil teachers in relation to teaching effectiveness, self concept and some personal values in M.P.* Unpublished doctoral thesis, Edu. Bhopal University.

- Shukla, S. S. (2010). Study of the Professional Aptitude of Ignou Teacher Trainees, *International Research Journal* , 1(12).
- Tasleema, J. & Muddasir , M. H. (2012). Teaching Aptitude of Elementary and Secondary Level Teacher Educators, *Journal of Education and Practice* , 3(2).
- Ushakumari, M. B. (2011). *Relationship of teacher aptitude with academic achievement and certain psychological variables of primary teacher trainees of Kerala* Unpublished doctoral thesis, Edu. University of Calicut  
 URI: <http://hdl.handle.net/10603/1552> Appears in, retrieved from [shodhganga.inflibnet.ac.in/handle/10603/1552](http://shodhganga.inflibnet.ac.in/handle/10603/1552)
- Vashishta, K. K. (1973). A study of predictive efficiency of admission criteria for B.Ed. students., *Journal of Education and Psychology*. 3.
- Vyas, R. P. (1982). *Relationship of Selected Factors with the Teaching Success of Prospective Teachers of Rajasthan*. Unpublished doctoral dissertation. Edu. Rajasthan University.” retrieved from <http://www.hec.gov.pk/InsideHEC/Divisions/LearningInnovation/Documents/Learning%20Portal/NAHE/1;Teaching%20As%20A%20Profession.pdf>
- Yuksel-sahin, F. & Hotaman, D. (2009). Vocational Guidance Aid in the Orientation to Teaching Profession and Teacher Education. *European Journal of Social Sciences*. 10(1).

## **APPENDIX –A:**

International Islamic University Islamabad

Department of Education

### **Teaching Aptitude Test Battery**

Dear Students,

I am very happy to approach you to collect information as a part of my research work. I am conducting research on "*Aptitude of Prospective Teachers for Teaching as Profession and its Relationship with their Academic Achievement.*" for the award of the Degree of Masters of Science (MS) in Education. For this, your responses will be computed and compared with your counterparts. So, you please go through each and every item in detail and give your frank response without any hesitation. Your responses will be strictly kept confidential and no information will be revealed. The results will only be used for research purpose. I also hope that you will enjoy giving your responses to these test items.

Thank you

Yours faithfully,

(Tanzeela Naz)

#### **Instructions**

1. In this test there are five sub tests and in every sub-test there are many items you have to answer all the items.
2. In the beginning of every sub- test necessary instructions are given along with example, read those instructions very carefully and then give answers.
3. Work fast as much as possible.
4. Do not turn the page until you are told to do so.



<u>Demographic Information</u>			
1.	Name -----		
2.	Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female
3.	Age	<input type="checkbox"/> 20-25	<input type="checkbox"/> 26-30 <span style="margin-left: 50px;"><input type="checkbox"/> more than 30</span>
4.	Teaching experience( if any) _____		

**Part- I**

(A) Fill in the blanks of list 'A' by appropriate word from the words given in list 'B'. Example: List 'A'

• Big: Small:: High : low

Himalaya, Sea, Low, Pit

S N	List 'A'	List 'B'
1.	Pan: Green::Milk.....	Cow, Goat, Light, Sweet
2.	Mountain: Stone::Sea.....	Milk, Pearl, Water, Foam
3.	Cotton: Spinning Wheel::Cloth.....	Cotton-plant, Yarn, Rail, Weaver's loom
4.	Birth: Death::Rise.....	Start, Sun, Name, Set

(B) Fill in the Blanks in the following number series by the proper number to complete appropriate number series.

• Example: 12, 10, 8, 6, 4.

5. 70, 6, 51, 43, 36, 30.....

6. 15, 12, 9, 6.....

7. 1, 1/2, 1/4, 1/8.....

8. 1/:1:: 1/20: .....

(C) Write logical answers of the statements at the end of each item.

9. Brother of a doctor at Islamabad resides in Lahore who is a lawyer. But there is no brother of that lawyer in Islamabad. What relations he is having with doctor.

\_\_\_\_\_

10. Three relatives are going on road. Two younger were daughter and so of the third. But the third was not his son. Tell the relation of the children with the third.

\_\_\_\_\_

11. Total of age of three boys is 40 years. After adding a fourth boy, their average age becomes 13 years. Tell the age of the fourth boy.

---

12. Touqeer said to Touseef that if you gave one rupee to me . I will have double the rupees of your. Touseef said to Touqeer that if you gave me one rupee, my rupees will become equal to yours. How many rupees does each have?

---

### Part-II

In this part, there are 20 statements, every statement is to be adjusted by five ideas, No statement is right or wrong, you decide on your own personal feelings and ideas that how you feel that statement. If you Strongly Agree with the statement then Mark No. 5. If Agree then No. 4 if Neutral then No. 3, if Disagree then No. 2 and if Strongly Disagree then No. 1.

S.N	Statements	5	4	3	2	1
1.	Children feel togetherness if they are given affection.					
2.	Behavior of the teacher should be such that students are afraid of them.					
3.	The teachers, who beat the students, have good discipline in their class.					
4.	Students do not study properly if they are given freedom of playing.					
5.	Teacher should be sympathetic towards the needs of the children.					
6.	Opinion of the students in school matters should be taken.					
7.	Children should be punished very hard for disobedience.					
8.	Teacher should not come face to face with the students.					
9.	Children are unable to take decisions.					
10.	Quarrel some students should be expelled from the school.					

### Part III

Following are some incomplete statements. Suggestions are given to complete. Encircle any one of the suggestion a, b, c or d you feel best against each item.

- Suppose a teacher of your school is suspended. Would you suggest him to:
  - induce the students.
  - appeal.
  - go on fast till death.
  - search the service somewhere else?

2. There is no games material in the school. You are game teacher. Would you:
  - a) ask the head for purchasing the material?
  - b) close the physical training program?
  - c) induce students against school head.
  - d) inform the higher authorities?
3. Suppose a teacher comes late daily. Would you:
  - a) suggest him to come in time?
  - b) inform the school head?
  - c) make him ashamed in the presence of other teachers?
  - d) advertise it among the students and parents?
4. Inspector has arrived in your school. A parent is complaining against you. Would you:
  - a) feel angry with parents?
  - b) satisfy the parents calmly?
  - c) decide to take revenge with their children?
  - d) clarify yourself to the inspector?
5. A teacher is having enmity with you. Would you:
  - a) also feel enmity with him?
  - b) conspire against him?
  - c) not care of him?
  - d) try to make him friend?
6. You are principal, one or two your teachers remain sitting in the class. Would you:
  - a) attract the attention of administrators?
  - b) inquire into the reasons?
  - c) comp liar to the teachers and parents?
  - d) call him and make him understanding in lonely?
7. There is a meeting of teacher association. Two teachers beside you start discussing on any topic. It will be better if:
  - a) you side that person who is speaking right.
  - b) request the president for an order of silence.
  - c) you keep silent.
  - d) ask both of them to keep quiet.
8. One of your colleagues speaks much. He uses to come to you daily at 4.00PM. when you are tired. Will you
  - a) hear his talks unwillingly?
  - b) ask him to come afterwards?
  - c) refuse him to some ate that time?
  - d) get yourself busy in some other work?

9. You are secretary of teacher association. Few people are present in the meeting .would you:
- request every member?
  - request some specific teachers who are your friends?
  - not call the meeting?
  - Tender your registration?
10. There is a cultural program in your school. You also recited a poem written by you in it. One teacher declares that poetry to be written by somebody else. Would you:
- break out of anger on him?
  - ask proof from him?
  - set anger with him?
  - remain quiet thinking of taking revenge with him?
11. You teach tuition to a boy. He is declared fail in annual examination of his class. Will you
- Make approach to the principal for him?
  - Try to make approach by the parents?
  - Work hard with the boy, giving proper advice to the parents?
  - Request to re-examine the copies?
12. Your principal is angry with you without any reason. Will you
- Try to remove his doubt?
  - Not care of him?
  - Make complaint of him?
  - Create an atmosphere against him?
13. You do not like humors, but persons do not leave from humoring. Would you:
- quarrel with them?
  - blow –up in humor?
  - not like to meet them?
  - stop talking with them?
14. Who made the grand-trunk road? With his problem two students approach you. Would you:
- return both after scolding?
  - tell the correct answer?
  - tell them to ask the history- teacher?
  - assure to tell in class?
15. You are principal. One teacher regularly makes complaint of a teacher to you. Would you:
- Not give importance to his talks?
  - Ask them not to do such things?
  - Show anger to him?

- d) Call and asks whose complaint in being made?
16. You have been appointed in Sindhi area. You do not know Sindhi language. Will you
- a) Try for transfer?
  - b) Try to learn Sindhi language?
  - c) Leave the service?
  - d) Sit back taking leave?

#### Part IV

**Complete the statements by choosing anyone of the two given sub- items. Answer by encircling 'a' or 'b' against proper item.**

1. Examine previous knowledge of the student before starting teaching, because-
  - a. Students may not make noise in the class.
  - b. Teacher may know the difficulties of the students.
2. Good knowledge in the teacher is essential, because-
  - a. He may keep the students in their control.
  - b. He may be able to remove the difficulties of the students.
3. Reading of newspaper is essential for a teacher, because-
  - a. He may affect the people in a good manner.
  - b. He may give essential information to the children.
4. Teacher should read periodicals regularly, because-
  - a. He may entertain himself.
  - b. He may have latest in formations.
5. Diagrammatic presentation is necessary while teaching because-
  - a. Children have interest in diagrams.
  - b. Children may understand the lesson easily.
6. Brief note should be prepared before teaching, so that-
  - a. Inspector may understand properly after seeing the note that what, how much and how the teaching is being done.
  - b. Teacher may be aware that what, how much and how is taught.
7. Maximum answers should be taken from the students. So that-
  - a. Students may take active interest in the lesson.
  - b. Students are kept evaluated.
8. Homework should be given to the students definitely, so that-
  - a. Students may not spoil time in play.
  - b. Students have practice of learning.

9. Teaching methods are essential for the teacher ,so that-
  - a. Teacher may have to work less while teaching.
  - b. Students may understand the lesson will.
10. Teaching should be dependent of the age of students, because-
  - a. Teachers have convenience.
  - b. Development of intelligence depends on the age.
11. It is essential for a teacher to have knowledge of child-psychology, because-
  - a. Teacher may be dear of the students.
  - b. Teacher may understand the students.
12. Homework should be corrected daily, so that-
  - a. Students are afraid of studies.
  - b. Students may have regular time to remove their weakness.
13. Competition of speech, essay, story, poetry etc, is necessary, so that-
  - a. Intellectual development in student may occur,
  - b. Students may remain always busy.
14. Cultural program are necessary for students, because-
  - a. Schools look active.
  - b. Development of sentimental power of children takes place.
15. Mass cleaning in school is necessary, so that-
  - a. School remains clean.
  - b. Awareness for cleaning is developed in the students.
16. To keep gradual record of the work of the students is necessary, because-
  - a. Proper evaluation of the students in done properly.
  - b. Students may work in time.
17. All students may not have equal knowledge of all the subjects, because:
  - a. All children do not have similar interests.
  - b. All subjects are not equally difficult.
18. There should necessarily be schools in society, so that-
  - a. Society gets development.
  - b. Children may study.

### **Part V**

**Following incomplete statements are given. To complete them some suggestions are given below each statement. Select the correct suggestion against each item by encircling either a, b, c or d .**

1. You have adopted teaching profession because:
  - a. your father was a teacher.
  - b. you have means of teaching in collage.

- c. you thought to become a teacher.
  - d. you did not get any service.
2. You decided to become a teacher at that time when:
    - a. you failed after trying for another service.
    - b. you did not get the expenses or further studies from the parents.
    - c. your studies discontinued after being failed in the college.
    - d. you acquired sufficient education for becoming a teacher.
  3. Your view regarding teaching profession is that it is:
    - a. very good
    - b. to be adopted in helplessness.
    - c. good to be left away.
    - d. any service is better than this.
  4. Which book you will like to read from the following?
    - a. information Technology
    - b. vet-nary sciences
    - c. techniques of teaching
    - d. discovery of science.
  5. You do service because:
    - a. Your service is in your village or city.
    - b. there is no other means to support your family.
    - c. you enjoy the service
    - d. you pass your time.
  6. Which of the following magazines you would like to read?
    - a. akhbar-e- Jahan
    - b. taleemi Zawiya
    - c. urdu Digest
    - d. family Magazine
  7. Which is the best profession:
    - a. medical
    - b. engineering
    - c. law
    - d. teaching
  8. Who should be a role model:
    - a. politician
    - b. teacher
    - c. judge
    - d. trader
  9. Sustainability of development and progress of people is dependent on:
    - a. political system
    - b. infrastructure

- c. education system
  - d. agriculture system
- 10. I am more comfortable and relaxed in the company:**
- a. relatives
  - b. class fellows
  - c. students
  - d. neighbors