# UNDERSTANDING PRE-SERVICE TEACHERS' MOTIVATIONS FOR JOINING TEACHING IN PAKISTAN

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#### ABSTRACT

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Who chooses to become a teacher in Pakistan, why, and what are their perceptions about teaching? The author of this dissertation study profiled the background characteristics and examined motivations and perceptions about teaching among entry level and advanced cohorts of preservice elementary teachers (n = 937) encompassing two new teacher education program (ADE and B. Ed Hons) in three provinces of Pakistan. The Factors Influencing Teaching Choice (FIT-Choice) instrument was translated into Urdu and its factor structure and reliability assessed in the Pakistani context. Altruistic type 'make social contribution' was the most influential, followed by ability, and intrinsic reasons in both entry and advanced level cohorts. Although trends in motivations remained the same across subgroups (based on gender, programs, science versus non science, provinces, parental occupation, decision time, prior teaching experience, and first career choice), differences existed in the level of scoring on each motivation. MANOVAs were carried out to find multivariate differences on the basis of subgroups. Females and those with teacher parents scored higher on personal utility factors; ADE enrollees scored higher on intrinsic reasons, those who made a decision to enter teaching before finishing high school, non-science majors, those with prior teaching experience, and those who chose to apply only to teacher education scored higher on intrinsic reasons. With regards to perception, overall all subgroups perceived teaching as a high demand (difficult and requiring expertise) but low return (low social status and salary) occupation. Advanced level preservice teachers appeared less satisfied with their choice of teaching than entry level teachers. Findings are interpreted in light the socio-economic and cultural context of teaching as a profession in Pakistan. Findings have implications for recruitment and retention of teachers in the context of acute teacher shortage and dismal student learning outcomes in Pakistan.

To Daddy

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# Chapter 1

# INTRODUCTION

This dissertation makes an attempt to understand motivations of prospective teachers for choosing teaching and their perceptions about teaching as a profession, in the context of two newly established degree granting pre-service teacher education programs in Pakistan. Sampling prospective teachers from the initial and final stages of the program, this project studies: 1) the structure of motivations of the prospective teachers enrolled in the first and the final semesters of two newly established degree granting pre-service teacher education programs in Pakistan for joining teaching as a profession; 2) the perceptions of prospective teachers about teaching as a profession. The study also examines the suitability of the FIT-Choice scale Richardson & Watt, 2006 [Richardson and Watt, 2006] to study teacher motivations and perceptions in the Pakistani context. It also explores the relationship of motivation to join teaching and perceptions about teaching with the background characteristics of prospective teachers.

# 1.1 Background: Teacher Education Reforms and Problem of Teacher Motivation

#### **1.1.1 Demand for Qualified Teachers**

The need for this study is grounded in the efforts of Pakistan to meet its obligations to provide universal quality education to all school age children. Pakistan's efforts are part of its constitutional mandates as well as international commitments. As nations around the world attempt to meet their commitments, primary school enrolments across the world are swelling. Between 1999 and 2009, primary enrollment worldwide grew from 646 million to 702 million children. The majority of this 9 percent growth in enrollment was concentrated in Sub-Saharan Africa (59%), South and West Asia (28%) and the Arab States (17%) UIS, 2011a [(UIS), 2011b]. This tremendous growth in the numbers of school going children is putting increased strain on initial teacher preparation systems of respective countries.

The initial teacher preparation systems are particularly strained to provide qualified teachers to an increasing number of school going children and schools. UIS has been revising its estimates for the numbers of new teachers required to achieve the goal of Universal Primary Enrollment (UPE) by 2015. According to the worldwide estimates generated in 2011, more than 2 million additional teachers will be needed by 2015 to ensure that every child has access to primary education. Sub-Saharan Africa alone needs more than 1 million of those additional teachers (55% of the global demand for additional teachers), and South and West Asia need about 300,000 new teachers (14% of the global demand); in the Arab states roughly 250,000 new teachers will be needed by 2015. In addition, 5.6 million teachers will be needed worldwide to maintain the current teacher labor force, assuming an annual attrition rate of 5%. This brings the total worldwide demand for teachers to over 7 million by 2015 UIS, 2011b [(UIS), 2011a].

As will be discussed in more detail below, I do not focus on the dynamics of supply and demand of teachers in the developing countries. Having observed the high demand for teachers, I am concerned more with the motivation of the teachers in the context of government efforts to recruit and prepare high quality teachers in order to meet the high demand for teachers.

Specifically, I examine the structure of the motivation and perceptions of prospective teachers in Pakistan, which is currently implementing national level reforms to improve the capacity of teacher education institutions to respond to the demand for qualified teachers.

As the number of schools and enrolled children has increased manifold, the capacity of teacher education institutions to attract and prepare high quality teachers and the ability of governments to pay those teachers has not seen a proportionate increase. Pakistan is not an exception. It faces severe teacher shortages. It is in fact one of the only two countries in South Asia the other being Bangladesh that faced teacher shortages between 3-20% in 2009<sup>1</sup>. About 50% of the shortage (296,600) is related to expanding the teaching workforce. However, teacher shortage due to issues of expansion is not the only obstacle in achieving the EFA target in a country like Pakistan. Anecdotal evidence suggests that teaching is not the career of choice but only a fall back career for most students. Also the rampant teacher absenteeism in public schools and attrition in private schools is interpreted in terms of lack of commitment and motivation amongst the teachers.

<sup>&</sup>lt;sup>1</sup>This shortage is based on the annual percentage of increase needed to meet the UPE goal by 2015.

Extensive research shows that teachers are the single most important policy-amenable input in producing quality education (e.g., Global Campaign for Education [GCE], 2006; OECD, 2005). In developing countries the supply of competent teachers may be even a more vital factor in improving the provision of quality education. As Chudgar and Luschei (2009) point out, schools and teachers tend to be even more important in contexts of poverty and inequality, than in richer and more equitable countries. As millions of first-generation learners enroll in schools for the first time, it becomes crucial to staff these new classrooms with quality teachers (Chudgar, Chandra, Razzaque). Several international agencies monitoring the progress of countries in achieving the MDGs warn that they would fall behind if urgent measures are not taken to meet the demand for teachers. As a recent report noted, "Without adequate numbers of professionally qualified teachers, including female teachers, who are deployed in the right places, well-remunerated and motivated, adequately supported and proficient in local languages, we cannot offer the world's children quality education." (UNESCO 2010: 16). In recognition of the premium placed on the quality teachers, Pakistan has taken substantive steps to reform its teacher education system. I will now provide you a brief description of those reforms to further set the context of this project.

#### **1.1.2 Recent Reforms in Initial Teacher Preparation**

Until very recently, the initial teacher preparation in Pakistan mainly consisted of short certification courses. Two most current models were known as Primary Teaching Certificate (PTC) given to teacher candidates after one year of training and 10 years of school education and Certificate of Teaching (CT) given to teacher candidates after one year of training following 12 years of school and college education. In the last decade or so the governments in all federating units of Pakistan<sup>2</sup>, have decided to phase out the above-mentioned certificate courses. These courses are in the process of being replaced by degree granting programs. This was decided after it was apparently realized

<sup>&</sup>lt;sup>2</sup>Pakistan is a federation of five provinces called, Punjab, Sindh, Balochistan, KhyberPakhtunkhwa, and Gilgit- Baltistan. In addition there are some Federal Administered Tribal Areas, Federally Administered Northern Areas, and the federal capital city of Islamabad. The state of Azad Jammu & Kashmir is an autonomous state.

that the certificate programs were following outdated curricula and were, as such, unable to expose their students to the knowledge and skills needed by competent teachers. This realization was also reflected in the National Education Policy of 2009, which called for raising the overall standards of teacher education. Amongst its various proposals, the Policy called for reform in pre-service training and standardization of professional qualifications. It provided a mandate for the change as follows:

- A Bachelors degree, with a B.Ed., shall be the minimum requirement for teaching at the elementary level. A Masters level for the secondary and higher secondary, with a B.Ed., shall be ensured by 2018. PTC and CT shall be phased out through encouraging the present set of teachers to improve their qualifications.
- 2. Teacher training arrangements, accreditation, and certification procedures shall be standardized and institutionalized.

As part of the implementation of the above-mentioned policy mandates a 4 year B.Ed. (Honors.) degree was established as the new standard for teacher education in Pakistan. The standardized format and scheme of studies for the 4 year baccalaureate degree would include a set of general education core courses, foundation courses in education, professional pedagogy courses, content courses to develop subject-matter proficiency in at least two disciplines of knowledge and a sequence of supervised field experiences / internships in schools. This degree is currently offered at universities.

In addition to the 4-year degree program mentioned above, a transitional two years Associate Degree in Education (ADE) has also been introduced. This degree is offered through the colleges affiliated with universities. The Associate Degree in Education is an en passant degree and can, as such, be viewed as a step towards attainment of the B.Ed. (Honors) qualification. These degree programs have now replaced the one-year certification routes into teaching. I might also mention that the curricula and the teaching approaches favored in the new degree programs are

heavily student centered and require the teacher educators to provide interactive teaching/learning experiences to the prospective teachers.

Within the context of these reform efforts in pre-service teacher education the following goals and research questions will be addressed.

### **1.2 Research Questions and Hypothesis**

The goal of this study was threefold. First, I examined the FIT-Choice scale for studying teacher motivations and perceptions in the Pakistani educational context, which differs from the contexts within which this scale has been used before-Australia (Richardson & Watt, 2007); the Netherlands (Bruinsma & Canrinus, 2012); Turkey (Eren& Tezel,2010); the USA (Lawver & Torres, 2011; Smith & Pantana,2010); Germany and Norway (Watt etal., 2012)- for example in terms of degree obtained, number of years in training and prerequisites for the program, and the general socio-economic context of teaching. Second, I examined the relationship between motivations for becoming a teacher and perception about teaching with backgrounds of prospective teachers. Third, I compared results of the FIT-Choice scale for two cohorts of preservice teachers: one at the beginning of teacher education and one at the end of teacher education. The following research questions were specified:

- 1. To what extent is the FIT-Choice scale suitable for studying pre-service teacher motivations and perceptions in the Pakistani context of teaching?
- 2. What are the motivations of Pakistani preservice elementary teachers for becoming a teacher?
- 3. How are pre-service elementary teacher's background characteristics related to their motivation to become a teacher and their perceptions about teaching?
  - a) Who becomes an elementary school teacher in Pakistan?
    - 6

- i. What is the demographic background of elementary prospective teachers enrolled in the B. Ed (Hons) and ADE programs in the provinces of Punjab, Sindh, and Khyber Pakhtunkhwa provinces?
- ii. What is the educational and professional background of these elementary prospective teachers?
- iii. What is the socio-economic status of these elementary prospective teachers?
- b) What are the preservice elementary teacher's perceptions about teaching?
- 4. In what ways do preservice teachers at the beginning of their teaching education differ from preservice teachers at the end of their teaching education in their motivations for becoming a teacher and their perceptions of teaching?

# **1.3 Definitions of Terms**

Motivation: The impetus or inspiration to move or to engage in a career or task.

## **1.4 The Rationale for This Study**

This study builds on an on-going conversation about raising the status and quality of teachers and teaching in Pakistan. As Pakistan takes steps to meet the demand for qualified teachers by reforming the initial teacher preparation programs along the lines described above, the issue of motivation and commitment of prospective teachers assumes added importance. While putting more teachers in the classroom may resolve the problem of meeting the demand for qualified teachers, it is unlikely to result in quality instruction if the issue of motivation and commitment to to teaching remains unaddressed. Teachers who lack the right motivation and commitment to teaching will ultimately disengage and become ineffective. They are also likely to drop out of teaching altogether. Where research has been conducted on the demand and supply issue, focusing mainly on the numbers of teachers required and supplied (Lewin and Stuart 2003), we do not know much about the human dimensions of the problem, such as individual's motivations for adopting teaching as a career. Several studies done in various countries have revealed that understanding teachers' motivation for choosing to teach is critical to understand how quality prospective teachers can be attracted and retained (Sinclair, Dowson et al. 2006; Watt and Richardson 2008)

Sinclair et al. (2006) also argue that students are more engaged and invested in their training if they enter pre-service programs with the right motives. Once they are part of pre-service programs, engagement with teaching and learning and better program attributes produce a sense of selfefficacy and enhance their commitment to teaching as a career.

Thus empirical evidence suggests that students with the right motives are more committed to teaching as a profession and are likely to stick to teaching as a profession. Those who enter teaching for the wrong reasons such as those who joined a program because they could not choose the majors of their choice leave teaching sooner than the former group (Sinclair, Dowson et al. 2006). Yet, the institution of teacher training, even in more developed countries, cannot select pre-service teachers on the basis of their motivation to become a teacher. The influence of the programs is, therefore, crucial in reinforcing the right motives in prospective teachers.

Given the low status of teaching in many countries, especially in developing countries, it is reasonable to assume, given the existence of many other possibly more financially rewarding career choices, that individual's choice to become teachers may not be entirely determined by an existing commitment on their part. Yet, once enrolled, their motivation and commitments may change for good or for worse due to a number of factors. It is in the interest of policies and programs aimed at reforming teacher education, to become cognizant of the structures of motivation of pre-service teachers. Such knowledge can help them enhance, by adjusting the programmatic features, the motivation, and commitment of the pre-service teachers,

In this context, I was especially interested in studying the motivational structure of pre-service teachers and their perceptions about teaching as a career, and if there exists variation in the structure of motivation and perceptions across semesters (first semester versus final semester). Furthermore, I was interested in understanding how pre-service teachers' motivation to teach and their perceptions are related to their background characteristics.

There is very little systematic research in Pakistan that highlights what motivates people to choose teaching as a career. Determination of motivation at various points along the continuum of learning to teach can help inform policies and program so that they nourish and sustain it. This project meets the twin objectives of filling a gap in research on teacher motivations as well as informs the policies that help foster motivation in the teachers.

In the next chapter, I have reviewed past studies on the constructs of motivation. These studies also helped me make the methodological choices to answer my research questions posed in this study. This review also helped me ascertain the theoretical framework. In chapter 3, I introduce the research questions and the methodology that I used to address them. I also provide a discussion of instruments, together with empirical strategies that I used to collect data needed for analysis. Chapter 4 provides a detailed analysis of data collected to help answer my research questions and concludes the study.

# Chapter 2

# CONCEPTUALIZATION AND LITERATURE REVIEW

This chapter is divided in two sections. In the first part, I have provided readers the broader educational context of Pakistan. Following contextual description, I have considered various perspectives on teachers' quality and emphasized the importance of complementing the notion of quality with the construct of motivation. After that I walk readers through the issue of status of teachers and teaching, particularly in the context of Pakistan to help conceptualize what it means to be a teacher in this context. This section helps establish background for discussion around perceptions about teaching in later chapters.

In the second section of this chapter, the literature review is divided into following parts. I begin by reviewing the literature on the construct of motivation which is of interest to this study to teach and enumerate various types of motivation. I also dwell on the literature about relationships between types of motivation and variable such as background attributes of prospective teachers in teacher education program.

In doing so, I trace the literature from theoretical, empirical as well as empirically grounded theoretical models that address the problem of measuring various types of motivation. At the end of the review, I also explore a theoretical model that flexibly orders the effects of various background attributes on motivation to teach. The theoretical framework conceived for this study has been developed based on Watt and Richardson's (2007) Factors Influencing Teacher Choice theory, and by drawing antecedents like various background characteristics of pre-service teachers related to the construct of interest.

#### 2.1 Country Education Context

Pakistan is increasingly becoming a fragmented and unequal society, where access to educational opportunities is determined along socio-economic lines. Pakistan's Human Development Index (HDI) in 2011 was 0.504, positioning her as 145 out of 187 countries. When adjusted for inequalities, the HDI falls further to 0.346, a loss of 31.4% due to inequalities in education, life expectancy at birth, and income, making Pakistan the most unequal countries in terms of

distribution of human development opportunities<sup>1</sup>. This situation is further exacerbated when the gender inequities are taken into account. With a Gender Equity Index (GEI)<sup>2</sup> of 29, Pakistan is behind all the countries in the region except Afghanistan<sup>3</sup>.

The overall literacy rate in the country is 57%, male and female literacy rate being 69% and 45% respectively. This ratio declines further for the rural areas to 29% as compared to 58% for men.<sup>4</sup> According to the report, titled 'The State of Pakistan's Children Report 2011', prepared by Society for the Protection of the Rights of the Child, almost 25 million children are currently out of school in Pakistan, while seven million of them have yet to receive some form of primary schooling. At primary level enrollment is 72% which drops by 37% as only 35% enroll in secondary schools. In rural areas only 23.5% girls ever make it to the secondary school as compared with 26.6% and 30.8% in India and Bangladesh, respectively. Also, those who stay in the school system, do not learn much (ASER, 2012).

Total enrollment at the tertiary level is 8% in 2011. Only 5.1% of people aged 17-23 years are currently enrolled in higher education in Pakistan. These indices are reflected in overall participation and performance in education and composition of labor force. The representation of women in the labor force in Pakistan is appallingly low at 21.7% compared with 84.7% for men.<sup>5</sup>

The inequity in access to education and subsequently better jobs is exacerbated due to the emergence and spread of private schools. Those falling in the lower middle or even middle income group are deprived of quality schooling because they cannot afford elite private schools. On the other hand performance of public schools is dropping as compared to private schools as shown by

<sup>&</sup>lt;sup>1</sup>Klugman, J. (2011). Human Development Report 2011-Sustainability and Equity: A Better Future for All. *United Nations Development Programme*.

<sup>&</sup>lt;sup>2</sup>The GEI measures gap between women and men in education, the economy and political empowerment.

<sup>&</sup>lt;sup>3</sup> Social Watch. (2012). Pakistan's gender inequality the largest in the the world, says watchdog organization Retrieved 08/31, 2012.

<sup>&</sup>lt;sup>4</sup>Source: Website of UNESCO's Institute for Statistics at http://www.uis.unesco.org/ FactSheets/Pages/Literacy.aspx

<sup>&</sup>lt;sup>5</sup>Klugman, J. (2011). Human Development Report 2011-Sustainability and Equity: A Better Future for All. *United Nations Development Programme*.

various studies conducted in the past 5-10 years Andrabi, 2011 [Andrabi et al., 2011].

Gradually, public schooling is being considered synonymous with low quality education as parents are increasingly sending their children to private schools. About 40% of children in Pakistan go to private school (including both rural and urban). There is a general perception that only those parents who cannot afford private schooling (including low fee private schools) send their children to public schools. This is especially true for rural areas and small towns.

Results from a study, ASER (2012) support this perception. Data reveals that the poorest quintile has the highest level of children enrolled in government schools (91%) whereas the remaining 9% of the children are enrolled in the private sector schools. It is important to note here that these 9% children from the poorest quintile are enrolled in low fee private schools, which are still more expensive than their public counterparts thus making them inaccessible to many. The poorer quintile has 82% children enrolled in government schools and 18% children enrolled in private schools. The richer quintile has 75% children enrolled in government schools and 25% in private schools. The richest quintile has the highest number of children enrolled in private schools (40%) and the lowest percentage of children in government schools (60%). Thus enrollment in government schools falls and for that of private school increases as one moves upward along the wealth index.

A large proportion of households are not able to send their children to schools at all because of poverty. Result of ASER (2012) displays the percentage of out-of-school children to be highest in the poorest quintile (46%) as compared to other quintiles.

Gender inequality in addition to wealth inequality puts females in an even more disadvantaged position. Due to lower level of access to secure schools, lack of mobility, and unaffordability issues girls are more likely to be deprived of quality education if they get any schooling at all.

Recent studies have also shown a correlation between wealth and student learning outcomes. ASER data shows that learning level of children increases as we move along the wealth index towards the richest quintile. Poorest have the lowest learning levels (16% Urdu/Sindhi/Pashto, 15% English, and 14% Math) and richest have the highest learning levels (42% Urdu/Sindhi/Pashto, 42% English, and 38% Math). This seems reasonable as wealthy families are not only able to send their children to better schools but area also able to afford private tuitions after schools and due to better parental education better prepared to help children at home.

There are no statistics that show the economic composition of enrollment at the higher education level but extrapolating from enrollment data at the school level it is logical to assume that those coming from stronger economic backgrounds have more representation at the higher education level. There are three tiers of education institutions at the higher education level.

Tier 1 consists of elite private and only a couple of public/ semi governmental universities including the Agha Khan University, Lahore University of Management, National University of Science and Technology. Second Tier of higher education is composed of public sector universities and private universities. The third tier comprises of government colleges, which are equivalent to community colleges in the US. Students from richer economic backgrounds (which also means that owing to better schooling and access to resources they are better prepared for higher education) end up going to elite universities or overseas and tend to enroll in more lucrative professions which have better social standing such as medicine, engineering, business, whereas those from rural and lower socio economic backgrounds go to second and third tier institutions where teachers are also trained.

# 2.2 Teacher Education

Traditionally, the two kinds of institutions in the public sector responsible for pre-service education of elementary teachers in Pakistan are: Government Colleges of Elementary Teachers (GCETs) responsible for preparing primary and middle school teachers (grades 1-5/8); and a small number of universities that offer pre-service teacher education for secondary school teachers through Faculties, Departments or Institutes of Education and Research. Only recently, as part of reform efforts in the area of pre-service teacher education, universities have started offering a bachelor in education program which prepares teacher for elementary schools (grades 1-8). Under these reform initiatives GCETs are now required to affiliate with one of the universities offering a Bachelor in

Education program.

#### **2.2.1** Program Types offered in the GCETs and Universities

Until very recently, the initial teacher preparation in Pakistan mainly consisted of short certification courses. Two most current models were known as *Primary Teaching Certificate* (PTC) – given to teacher candidates after one year of training and 10 years of school education-and Certificate of Teaching (CT) – given to teacher candidates after one year of training following 12 years of school and college education. In the last decade or so the governments in all federating units of Pakistan<sup>6</sup>, have decided to phase out the above-mentioned certificate courses. These courses are in the process of being replaced by degree granting programs. This was decided after it was apparently realized that the certificate programs were following outdated curricula and were, as such, unable to expose their students to the knowledge and skills needed by competent teachers. This realization was also reflected in the National Education Policy of 2009, which called for raising the overall standards of teacher education. Amongst its various proposals, the Policy called for reform in pre-service training and standardization of professional qualifications. It provided a mandate for the change as follows:

- A Bachelors degree, with a B.Ed., shall be the minimum requirement for teaching at the elementary level. A Masters level for the secondary and higher secondary, with a B.Ed., shall be ensured by 2018. PTC and CT shall be phased out through encouraging the present set of teachers to improve their qualifications.
- 2. Teacher training arrangements, accreditation, and certification procedures shall be standardized and institutionalized.

<sup>&</sup>lt;sup>6</sup>Pakistan is a federation of five provinces called, Punjab, Sindh, Balochistan, Khyber Pakhtunkhwa, and Gilgit-Baltistan. In addition there are some Federal Administered Tribal Areas, Federally Administered Northern Areas, and the federal capital city of Islamabad. The state of Azad Jammu & Kashmir is an autonomous state.

As part of the implementation of the above-mentioned policy mandates a 4 year B.Ed. (Honors.) degree was established as the new standard for teacher education in Pakistan. The standardized format and scheme of studies for the 4 year baccalaureate degree would include a set of general education core courses, foundation courses in education, professional pedagogy courses, content courses to develop subject-matter proficiency in at least two disciplines of knowledge and a sequence of supervised field experiences / internships in schools. This degree is currently offered at universities.

In addition to the 4-year degree program mentioned above, a transitional two years<sup>7</sup> Associate Degree in Education (ADE) has also been introduced. This degree is offered through the colleges affiliated with universities. The Associate Degree in Education is an en passant degree and can, as such, be viewed as a step towards attainment of the B.Ed. (Honors) qualification. These degree programs have now replaced the one-year certification routes into teaching. I might also mention that the curricula and the teaching approaches favored in the new degree programs are heavily student centered and require the teacher educators to provide interactive teaching/learning experiences to the prospective teachers.

Preservice teacher education (PSTE) in Pakistan is still under transition which means that older certification route into teaching are not completely phased out yet. The new degree programs, introduced under current policy reform, have to compete with existing PSTE programs of elementary teaching. Several institutions in the public and private sector-including the Allama Iqbal Open University (AIOU), one of the largest providers of teacher education in Pakistancontinue to offer the shorter certificate courses for employment as elementary school teachers. Graduates from the shorter certificate courses can still get into teaching jobs with similar status and salary as those who would go through much longer professional degree courses. There is thus a wide range of PSTE programs available to the prospective teachers to choose from. Teacher recruitment policy is still flexible and requires a certain number of years of education to be eligible for becoming an elementary teacher and not necessarily a specific certificate or degree. This means

 $<sup>^{7}</sup>$ ADE is three years long in Punjab. Rest of the provinces are offering a two year ADE program.

that candidates who have received a general bachelor of education degree are also eligible for becoming elementary teachers.

The presence of alternative certification routes into teaching is increasingly recognized as an impediment by the advocates of B.Ed. (Honors) and ADE. Yet, consumers may flock to such programs if they are accepted by a differentiated and diverse job market, both in the public and private sectors. The short-term courses are not likely to disappear if they are in demand in the labor market due to the existence of alternative routes of certification.

Both B. Ed (Hons) and ADE programs prepare teachers for elementary teaching. However, due to a difference in the length of programs, those who graduate from the B. Ed Hons programs at universities are inducted into a higher rank (BPS 16) whereas those graduating from ADE programs are inducted into BPS 14 causing gradation in the composition of elementary school teaching workforce. Admission into a B. Ed Hons program is considered more competitive than admission into an ADE program. Moreover, investing 4 years of education in a B. Ed program as compared to 2 years required for an ADE means that those who opt for a university degree can afford to invest additional time in an academic program and forgo income they would have earned otherwise.

The PSTE programs based in universities in the four provinces have not evolved along similar pathways. Although the universities are linked to the Higher Education Commission (HEC) rather than the provincial governments, they are also responsive to provincial conditions and institutional structures. Some of them are actively engaged in designing and offering pre-service teacher education programs, while others only serve as examining and credentialing agencies. Some of them offer the whole range of Bachelors, Masters', and doctoral degrees in education, while others have a very limited range of program offerings. Some of them have a full-fledged faculty or department while others operate with only a small number of part-time instructors who have full-time positions in nearby colleges or in other departments of the university.

## 2.3 The Status of Teaching

Status is a very subjective term. In the case of a profession, it may mean different things to different people depending on their environment and context. Economists mostly measure it in pecuniary terms, i.e. the remuneration, other tangible rewards and career paths a profession offers. Social scientists look at status in terms of the social and cultural standing of a profession and how it is discerned by the society. I will now give a brief overview of what it means to be a teacher in Pakistan. Different occupations offer different advantage and disadvantages to their incumbents Lortie, 2002 [Lortie, 2002]. Knowing the context of teaching profession in Pakistan will help understand later how perceptions about teaching and its status attract certain types of entrants and their motivations behind choice of teaching.

#### 2.3.1 Social Status of Teachers and Teaching

The social status of teachers and teaching as a profession cannot be removed from the context within which they work, i.e. their working conditions, societal perception of their performance and abilities, their economic status, rewards and career progression, as well as professional development opportunities. I, now, give a brief overview of these aspects of teaching in order to help understand the overall context of what it means to become a teacher in Pakistan.

#### 2.3.2 Context of Public School Education

Education, especially school education, is a much neglected policy area in Pakistan. Even though the government committed to spending 4% GDP on education, GDP allocation has in fact dropped over the last few years. Spending was raised from 2 to 3% in the period between 2006-2009 but dropped to 2% in 2010 (citation). The expenditure on education made at the provincial level are even dismal with some provinces spending only 60% of their education budgets.

Primary and secondary schools are worst hit and probably receiving less than 68% of government expenditure on education. That is under 1.5% of GDP goes to public schools that

need it the most. Over all 9% of government spending is on education, placing Pakistan 113th amongst 120 countries on the education development index (UNESCO).

Given the low levels of public spending on education the overall condition of public schools in Pakistan does not make it an attractive workplace for ambitious and bright youth. Teachers work in overcrowded multi-grade classrooms. According to UIS (2010) the pupil teacher ratio in many classrooms is 40:1. In rural Pakistan, one or two teacher schools are quite common which result in stressful working conditions due to heavy workloads and inability to deal with students of varying ability levels, as well as a sense of isolation that affects motivation. School facilities are poor and there is a lack of teaching and learning materials. Only 36% schools are said to be in a satisfactory condition. Basic facilities are unavailable in a vast majority of schools nationally. Only 65% have drinking water, 62% have toilets, 61% have a boundary wall, and 39% have electricity (citation). These conditions are not different from those identified in other similar teaching contexts. Similar to the Pakistani contexts, teachers in other countries like Botswana, Chile, and India are overworked and teaching is under resourced Garegae, Mzwinila, & Keitumetse, 2012 [Tatto et al., 2012]; Ramachandran et al., 2005 [Ramachandran et al., 2005].

Given these conditions low motivation and consequently teacher absenteeism are being perceived as formidable problems in Pakistan. Absenteeism is further exacerbated due to travel and accommodation issues faced by teachers in both urban and rural areas (Bennell, 2007).

#### 2.3.3 Economic Status of Teaching

In Pakistan, public school teachers are civil servants. Teacher salaries, therefore, are based on the Basic Pay Scale <sup>8</sup> (BPS) for civil services of Pakistan and are equivalent to those of other civil servants holding comparable qualification.

<sup>&</sup>lt;sup>8</sup>Government employees are paid based on a Basic Pay Scale system commonly referred to as BPS. BPS system consists of fixed salaries and annual increment structure based on the stage an employee is at. BPS system is revised every few years. In addition to basic pay it also sets the value of other allowances for which a civil servant is eligible like medical, and conveyance.

An elementary teacher is hired in BPS 14 which means they get paid around Rs. 8,000-26,300<sup>9</sup> (USD 80-163). In addition to the basic pay there is also a small amount payable to for medical and conveyance. The stages of annual increment are fixed and every year a teacher in BPS 14 gets a nominal increment. How initial salary and later increments are determined in Pakistan is similar to the practice in some other countries where teachers are hired as state employees. In Spain for instance, salaries of primary school teachers are paid by the Spanish state based on the general law on Civil Service Employees Castro & Flores, 2012 [Tatto et al., 2012].

There are two ways to look at the economic status (as measured by pay) of teachers. One is to see how much teachers make as compared to average per capita income. Public school teachers earn as much as 3-4 times as much as their private school counterparts and almost 6 six times the average person's average per capita income in Punjab Aslam, Jamil, and Rawal, 2011 [Aslam et al., 2011]. Based on this comparison, teacher salary may appear a lot. However, it is still very low in absolute terms. School teaching in Pakistan is perceived a white-collar job. Choosing teaching means one forgoes the social status and earning profile that comes with becoming a doctor, an engineer, or a businessman. Where it may provide those coming from lower middle or low-income backgrounds a chance at mobility into white collar class, it has no attraction or prestige for those who come from middle and upper class backgrounds.

Comparison of teacher salaries with comparable persons in other professions, as shown in Table 2.1 also shows that a teacher's economic status is not much different from that of other white collar jobs.

#### 2.3.4 Politics [or political nature] of Recruitment, Transfers and Career Paths

As mentioned earlier teachers are hired as civil servants. A primary school teacher in Pakistan is required to have completed a Bachelors of Arts (BA); Bachelors of Science (B.Sc) degree with at least second division from a recognized university/ Institute with a B. Ed. (second division) from a recognized university; OR Associate Degree of Education of three years (second division)

<sup>&</sup>lt;sup>9</sup>According to BPS 2011 rates.

from a recognized University; OR BS.Ed./ B. Ed (Hons) 4 years degree in (second division) from a recognized university; OR a MA/M.Sc degree (second division) from a recognized university. Depending on the subject area or specialization a diploma requirement may be added to the above.

Recruitment and posting/ transfer of teachers is however marred with political interference. Patronage based hiring has specifically been an issue in the province of Sindh. Only recently the provincial government in Sindh introduced a merit based policy in the province through which priority is given to candidates who are more qualified, score high on third party tests, and are willing to be placed in under staffed schools on fixed term contracts. About 13,500 teachers have been hired through this policy. Although initial evaluations have shown that merit based recruitment has dropped absenteeism rates long term effectiveness of the program remains to be seen (World Bank, 2012).

Unplanned and unwanted transfers are problematic for teachers who are transferred to distant rural areas away from families without any proper accommodation and transport facility as well as single or married women who may not want to move away from family. 64% teachers when asked through a survey said that paying a bribe to accomplish a transfer to desired location is an effective method (SchoolTELLS, 2012). Politicization due to unions is also an issue. There is anecdotal evidence as well as newspaper reports of strike actions that teacher unions influence teacher recruitment, transfers, and promotions. When asked through SchoolTELLS survey only if unions can help teachers in transfer-related problems, 63% of teachers answered in the affirmative suggesting that teachers recognize and possibly utilize their unions in getting transfers. Taking disciplinary action against teachers becomes very unlikely because of these political interferences.

In terms of career path, teaching is an 'unstaged' and 'front loaded' career Lortie, 2002 [Lortie, 2002]. Lortie's observation, though made for teachers in the US context, is true for Pakistan. This means that while beginning teachers may receive a comparable pay and status as do entrants in other bureaucratic positions, their subsequent progress is relatively slow in teaching. During his or her lifetime an elementary teacher will at the most get promoted from BPS 14 to BPS 18 and will make twice as much as close to their retirement.

There are not many career pathways available to an elementary teacher. An elementary teacher, based on seniority, may become a head teacher if a secondary school teacher is not available to take that position. Promotions are based on seniority and satisfactory performance shown on the Annual Confidential Report (ACR). The ACR has only become a formality. There is dissatisfaction among teachers as several 'out of turn' promotions are issued where teachers who do not have seniority are promoted because of their political ties Razzaque & Magno, 2012 [Magno, 2013]. This is especially problematic in the province of Sindh where teacher hiring and promotions have long been based on patronage rather than merit. During elections teachers are detached from education departments and placed under the election commission where they serve at polling booths established in schools. So, politicians prefer to post those who are loyal to them. There is no encouragement or reward for meritorious performance as the current policy considers seniority as the main criterion. This has a negative impact on the motivational level of teachers who question the reason for putting in extra effort if there is no tangible return. Teacher being a 'career-less' occupation is an issue in attracting bright students to the profession even in developed countries. For instance, Swiss research shows fewer parents want their children to go into teaching because of few career development opportunities and lack of opportunities for promotion. Even though the starting salary is attractive, it reaches a plateau soon Brandt et al., 2012 [Tatto et al., 2012].

Factors such as working conditions, lack of prestige and career development opportunities in the profession may have detrimental effect on the motivations and perceptions of those who eventually join teacher education.

Recently like other countries in the South Asia region Pakistan is taking steps to improve incentives and performance through training linked to career paths of teachers. For example, the Sindh government is gradually implementing a comprehensive teacher education development program that envisions an integrated and coherent system for pre-service and systematic in-service training (continuous professional development) linked to entry and career progression.

## 2.4 Teacher Quality and Motivation

Everything else being equal, quality of teaching is single most important influence on students' learning gains. Unevenness in teachers' quality has been universally recognized as an important determinant of differences in school quality when measured in terms of student learning Hanushek and Woessmann, 2011 [Hanushek and Woessmann, 2011]. Some observers also deem it as one of the most important institutional influences on student achievement Goldhaber, 1999 [Goldhaber and Brewer, 1999]; Hanushek, 2002 [Hanushek et al., 2002]; Slater, 2009 [Slater et al., 2009]. Poor quality teachers and teaching have also been cited as the key factor behind low achievement scores of students in South Asia SchoolTELLS; Andrabi, 2009 [Andrabi et al., 2009].

Recent research confirms that improving the quality of teaching may be the most effective means of raising school quality across less developed nations Glewwe and Kremer, 2006, p.995 [Glewwe and Kremer, 2006]. So, how does one define quality? Question that remains is what makes a teacher effective? The answer to this question is important because it directly informs recruitment and remuneration policies. Researchers measure teacher quality teachers, however, has undergone various changes in literature. This project is about teacher motivation, but this concern with motivation is ultimately one about teacher quality. The definitions of teacher quality have also approached issues of motivation after an initial dependence on other variables such as teacher credentials and student achievement. Below, I recount developments in thinking about teacher quality focusing on ways in which the construct of motivation has found inroads into scholarship on teacher quality.

One stream of literature, used mostly by economists, defines teacher quality in terms of proxies such as teacher qualifications and credentials. Highest degree achieved by the teacher, scores on college exams, other certifications for both pre and in-service trainings all count towards determining how effective a teacher will be. However, teacher preparation as represented by his or her credentials has not been found to be associated positively with student achievement. There is however little evidence in the US literature that academic background e.g. Clotfelter et al., 2007 [Clotfelter et al., 2007]; college admissions scores e.g. Ferguson and Ladd, 1996 [Ferguson and Ladd, 1996], certification exam scores e.g. Boyd et al., 2008a; [Boyd et al., 2008]; Clotfelter et al., 2007 [Clotfelter et al., 2007]; Goldhaber, 2007 [Goldhaber and Brewer, 1999], or personality characteristics Hoy and Woolfolk, 1993 [Hoy and Woolfolk, 1993] can predict student achievement.

Some studies, particularly conducted in the context of South Asia, also confirm that 'standard resume characteristics', which are generally tied to recruitment and remuneration policies in public sector schools, do not matter to student learning Aslam and Kingdon, 2012 [Aslam et al., 2012]. This sounds reasonable in the case of Pakistan, where relatively higher teacher characteristics coexist with a widely documented low state of student achievement. As shown in the following table 2.2, Pakistan comes out at the top (except in upper secondary category) in terms of percentage of trained teachers in the South Asia region.

If we expect the observable teacher characteristics to translate into student achievement, we should expect Pakistani children, on average, performing at a higher level than most other countries in the region. We know that this is not the case.

Operationalization of quality in terms of subject knowledge also shows mixed results. It is generally believed that teachers' subject matter knowledge is a positive influence on student learning. Yet, it is not clear how subject matter can spontaneously translate into student learning. Our personal experiences with other teachers also tell us that not all knowledgeable individuals are also good teachers. This observation is confirmed by a recent study, titled School TELLS-Pakistan (2011), conducted in a sample of 120 schools in 3 districts of Punjab aimed to comprehensively understand the relationship between student learning levels and factors that can influence them, such as teachers' background, children's background & ability, classroom environment and school environments. In addition to other data collected, the study tested 1500 students (grades 3 & 5) and 300 teachers on same items in math and language.

In addition, the study also collected information on teacher education, experience, teacher

effort, time on task, and absence etc.

Findings show that teachers from rural Punjab are more competent than their counterparts in India where similar data collection showed worrying levels of teacher competence Kingdon and Banerjee, 2009 [Kingdon and Banerjee, 2009]. However, this competence did not translate into student achievement. For example math scores revealed that where a little over 80% teachers answered correctly on division question only a little over 30% of their students answered those questions right. Similarly percentage of teachers and students answering completely correctly were; on questions of fractions 55% and 5%; Definitions 50% and 10%; summarizing 55% and 8%.

Before proceeding further, I should also talk about the global trend of using large-scale assessment data to make decisions about quality, including the quality of teachers. They are also called high-stakes test due to the implications of their results for funding for teachers and rewards/punishments for the teachers. One example of this growing trend is Michigan's senate's recent approval of a broad overhaul to its 1937 teacher tenure act. This overhaul includes "teachers' effectiveness," as grounds for dismissal of tenured teachers. But this creates the problem of defining and measuring teachers' quality. There are compelling arguments that a variable such as 'student achievement' is but only one measures of teachers' performance Ravitch, 2011 [Ravitch, 2011]. Teachers and schools, even the states, can game the system in order to bump up scores (Ravitch). Focusing attention on test scores as measures of teachers' quality takes our sights off the other important influences, such as student and family characteristics. Though old in concept (dating back at least to the time of French psychologist Alfred Binet) the standardized testing has become increasingly popular and the main evaluative tool to measure progress toward reforms in the United States especially in the aftermath of report A Nation at Risk. The No Child Left Behind (NCLB) act passed by the Bush administration in 2001 took the stakes associated with the standardized tests to new heights.

Like many other 'travelling reform' Steiner-Khamsi, 2012 [Steiner-Khamsi, 2012] ideas, standardized testing as a way to measure education and teacher quality has crept into the education

discourses taking place in developing countries like Pakistan. Although in Pakistan the name is being used synonymously with large-scale testing which is given to a large number of students irrespective of how it is developed. In my conversations with bureaucrats from the Punjab Examination Commission in Pakistan (the commission holds large scale annual testing of students in grades 5 and 8) I found out that test scores are intended to be used to both penalize and reward teachers and schools.

When the same test is given to a large number of students in the same grade, it is assumed that the test scores will allow for comparisons of various kinds. Does this assumption make sense? I think it does not stand some very preliminary scrutiny primarily due to the enormous, almost intractable, diversity in Pakistan. In a country like Pakistan which is afflicted by the worst of inequities assuming that the same test given to a large number of students (ignoring inside and outside school factors) allows for some sort of comparison of teacher quality and performance does not make sense at all. As has been found in the US this kind of evaluation may only result in demoralized frustrated teachers Feng, Figlio, and Sass, 2010 [Feng et al., 2010]. A suggestion of taking students' achievement as a proxy for teachers' performance does not resolve so easily.

Even though resume characteristics have proven to be insufficient measures of teacher quality, the standard practice in teacher recruitment around the world seems to revolve around just that. Like in the case of Pakistan as described earlier countries like

So, if teacher resume characteristics alone are not a sufficient indicator of teacher quality then what is? What has been missing from the above characterizations of teacher quality is the construct of 'motivation'. Teachers' professional ethics and lack of motivations are also blamed for low levels of learning. Low teacher motivation has been linked with low student achievement across different contexts Miller et al., 2007 [Miller et al., 2008]; Clotfelter, Ladd and Vigdor, 2007 [Clotfelter et al., 2007]. Putting highly qualified teachers into the classroom is not a sufficient condition for learning (citation). Teaching is predicated on, in addition to credentials and subject knowledge, motivation to succeed in making children learn. Therefore, teacher qualify teaching.

A senior teacher of secondary mathematics in Pakistan brought the point home in a conversation with me when he said that to teach well you need sound knowledge of your subject and a burning desire to teach. "The desire to teach" can be interpreted as an aspect of motivation.

The foregoing discussion suggests an emerging consensus on dependence of student learning, ceteris paribus, on teacher quality. The discussion also shows how simple definitions of teacher quality that assume teachers' resume characteristics as a measure of quality are problematized when focus shifts toward student achievement. Likewise, defining teacher quality solely in terms of student achievement is also problematic, even hazardous when used in rewarding or penalizing teachers. In order to develop a wholesome understanding of quality of teachers, we need to develop insights about what factors contribute to motivating individuals to become and persevere as teachers.

This leads us into the second section of this chapter.

#### 2.5 Motivation to Teach

The prospective teachers do not have a single reason for joining teaching as a profession. They may be *motivated* to do so for a variety of reasons. Some may be *forced* into teaching because they could not get admission into a major of their choice. Others may join because they like teaching young people. Still others may find teaching to be a stopgap arrangement before taking the next step in their lives. This differentiated nature of motivations has been an object of study by social psychologists for several decades now. As expected from commonsense experiences, the studies exploring reasons for taking up teaching have categorized motivations as *intrinsic, extrinsic*, and *altruistic* Bruinsma and Jansen [Bruinsma and Jansen, 2010]; Brookhart and Freeman, 1992]; Bastick, 2002 [Bastick, 2002]; Thomson, Turner, and Nietfeld, 2012 [Thomson et al., 2012].

Intrinsic motivation is defined as "doing an activity for its inherent satisfaction rather than for some separable consequences" Ryan and Deci, 2000 [Ryan and Deci, 2000]. Intrinsic motivation for teaching refers to an internal interest by the individuals to use their subject knowledge and
skills to teach children Kyriacou and Coulthard, 2000 [Kyriacou and Coulthard, 2000]. As such the intrinsic motivation does not depend on an external incentive to join teaching. Because intrinsic interests exist without any external incentive Malone and Lepper, 1987 [Malone and Lepper, 1987] they are considered more desirable to have as they often result in an individual's long-term engagement and sustained effort in teaching Ryan and Deci, 2000 [Ryan and Deci, 2000].

The teachers who enter teaching with an intrinsic motivation also tend to view teaching as socially worthwhile and important job and nurture a desire to help children succeed and a desire to help society improve Kyriacou and Coulthard, 2000 [Kyriacou and Coulthard, 2000].

Extrinsic motivation refers to "doing an activity for the attainment of a separable outcome" Ryan and Deci, 2000 [Ryan and Deci, 2000]. Extrinsic reasons for teaching cover aspects of the job which are not inherent in the work itself, such as long holidays and salary Kyriacou and Coulthard, 2000 [Kyriacou and Coulthard, 2000]; Ryan and Deci 2000, p. 117 [Ryan and Deci, 2000]. While the research on motivation has expanded in recent years, earlier research done has also shown differences in engagement, interest, and quality of experience and performance for individuals with intrinsic and extrinsic motivations Malone and Lepper 1987 [Malone and Lepper, 1987].

While intrinsic motivation is considered more effective in producing desirable outcomes such as increased engagement and commitment, extrinsic motivation does not always lead to negative outcomes. In fact, outcomes may converge for both intrinsic and extrinsic motivation.

Thus extrinsic motivations are further sub-divided into *adaptive* and *maladaptive motivations* Bruinsma and Jansen [Bruinsma and Jansen, 2010]; Martin, 2006 [Martin, 2006]; Sinclair, Dowson et al., 2006 [Sinclair et al., 2006]. According to Bruinsma & Jansen (2010) extrinsic motivation is categorized as *adaptive* if it results in greater commitment to teaching and *maladaptive* if it results in lower commitment to teaching. Bruinsma and Jansen (2010) found that the pre-service teachers with adaptive motives, whether *extrinsic* or *intrinsic*, intended to remain in the profession for a longer time than the pre-service teachers who indicated having extrinsic maladaptive motives. While the research mentioned so far, on the motivation to become a teacher has studied motives that are based on pre-service teachers' values and interest in the profession Fokkens-Bruinsma and Canrinus [Fokkens-Bruinsma and Canrinus, 2012]; Watt and Richardson, 2007 [Watt and Richardson, 2007] Watt and Richardson chose to focus on the values and expectancies <sup>10</sup> Watt and Richardson (2007) drew on the literature on teacher education, social cognitive theory, and career choice and mapped the most often cited reasons for choosing teaching (intrinsic, extrinsic, and altruistic) from a vast range of studies, on the main constructs of a well established motivational model-the expectancy-value theory of motivation Eccles, 1983 [Eccles, 1983]; Eccles, 1987 [Eccles, 1987]; Wigfield and Eccles, 1992 [Wigfield and Eccles, 1992]; Eccles and Wigfield, 2002 [Eccles and Wigfield, 2002] thus developing an integrative, and theoretically grounded way of studying the reasons individuals give to become a teacher. They called their model the *Factors Influencing Teaching Choice (FIT-Choice) theory*. The FIT-Choice scale provides the most elaborate operationalization of motivation to teacher when compared with earlier studies.

Figure 2.1 shows the contents of the FIT-Choice model. It consists of five higher order constructs: socialization influences, perceptions of the task, perceptions of the self, values related to teaching and the teaching career as a fallback career (Richardson and Watt 2006). The higher order construct, socialization influences, consists of three first-order constructs. 'Prior teaching and learning experiences' are those teaching and learning experiences that have had a positive influence upon the pre-service teacher, for example if a student has had a good role model during his or her education. 'Social influences' mean the positive influence of significant others such as family. 'Social dissuasion' is the extent to which important others have advised the individuals against becoming teacher. The second higher order construct, perceptions of the task, consists of two first order constructs: 'demands', for example, the required expertise and task difficulty, and 'task

<sup>&</sup>lt;sup>10</sup>The expectancy-value theory states that the choices people make, and their persistence and performance in those choices depend on two factors; (1) expectations- how well will one do at that task; (2) the value (negative and/or positive) they associate with that success. The choice is also influenced by the cost associated with it as making one choice eliminates the other option Eccle et al's, 1983 [Eccles, 1983] of pre-service teachers to become teachers.

return', for example, salary and social status. The third higher order construct, self-perceptions, consists of the first-order construct of 'teaching ability'.

The fourth higher order construct, values, consists of the first-order constructs of 'intrinsic career values', 'personal utility values' and 'social utility values'. The first-order construct of 'personal utility values' is further divided into the constructs of 'job security', 'time for family' 'job transferability' and 'bludging' (such as, teaching allows shorter work day and long vacation). The first-order construct of 'social utility values' is divided into the constructs of 'shaping children's/adolescents' futures', 'enhancing social equity', 'contributing to society' and 'working with children/adolescents'. The final higher order construct of 'fallback career' consists of the first-order construct of 'fallback career'. This relates to pre-service teachers considering the profession as a fallback career or as a default option.

In their research with pre-service teachers, Watt and Richardson (2007) found that counter to much earlier findings Haubrich, 1960 [Haubrich, 1960] teaching was not typically considered a "fallback" career, and social persuasion was also not a strong factor in individuals' choice of teaching as a career. So motivations that had previously been labeled as extrinsic (or maladaptive extrinsic) did not seem to be driving the choice of pre-service teachers. They found that participants' teaching ability-related beliefs, personal utility values (job security, time for family and job transferability), and social utility values (including the desire to shape the future, enhance social equity, make a social contribution and work with children/adolescents) and positive prior experiences of teaching and learning were all important motivations for choosing teaching as a career.

There is a congruence between the earlier mentioned concepts of extrinsic adaptive and extrinsic maladaptive motives put forward by Bruinsma and Jansen (2010), and Watt and Richardson's (2007) motivational factors. It is important to elaborate on this congruence. Fokkens-Bruinsma and Canrinus (2012) correlated the first and higher order constructs within the FIT-Choice scale with pre-service teachers' self-reported commitment to teaching (affective, continuance, and normative) and their plans for future involvement and effort they intended



Figure 2.1: FIT-Choice Theory (Watt and Richardson, 2007).

to expend in their teaching. Based on those correlations they labeled the motives; expertise, social status, teaching abilities, intrinsic career values, job transferability, shaping future

children/adolescents, enhancing social equity, making a social contribution, working with children/adolescents as adaptive as they predicated early intentions of effort, involvement and commitment. Fallback career and social influences were considered maladaptive. Their analytical work to draw congruence between the FIT-Choice motives and prior work on intrinsic, extrinsic (adaptive and maladaptive) is helpful because it connects two streams of literature on types of motivations. However, it shows that the choice of labeling a motive adaptive or maladaptive is a highly contextual decision and that their choice of the label adaptive is a bit misleading since adaptive from one perspective (e.g. intention to stay in teaching) does not always positively correlate with a more desirable outcome of effort exerted in teaching.

Consider, for example the case of personal utility motives which are generally associated with external forces. For instance, in the case of Pakistan, becoming a teacher in the government school offers an opportunity to get a job for life (FIT model calls it job security). The individual making a choice to become teacher may not like to teach (hence, absence of intrinsic motivation), but would still like to grasp the opportunity for personal utility, or to use the earlier terminology, extrinsic reasons. If one uses Fokkens-Bruinsma & Canrinus's (2010) approach to labeling, since the personal utility value of job security is positively correlated with the decision to stay in teaching then it can be inferred that it has assumed an adaptive character). At the same time it is intuitive to think that it is a maladaptive motive; in this scenario that person will either remain absent because of the lack of accountability and lack of the 'right motive' or not exert enough effort to ensure student learning. So, a motive which is adaptive when seen from the viewpoint of intention to stay becomes maladaptive from the viewpoint of effort.

Due to the highly contextual nature of this work there is a need for more analysis using explanations from the social, cultural, and economic contexts within which the prospective teachers operate. Fokkens and Bruinsma's work lacks that analysis. By including such analysis in my study I will extend the work done by Fokkens and Bruinsma as well as propose policy relevant suggestions for systemic improvement of education in Pakistan.

Watt and Richardson (2007) also conceived constructs regarding perceptions about teaching

namely; task demand and task return. They expected that perceiving teaching as difficult and requiring expertise may deter people from joining it, while perceptions about its high status and high return in terms of salary may moderate such decisions. Consistent with the cost component of the expectancy-value theory perceptions about task difficulty may negatively influence self-efficacy of people but the value they attach to it also influences their motivation to pursue the task Wigfield and Eccles, 1992 [Wigfield and Eccles, 1992]. From establishing the context of teaching in the previous section, I assume that prospective teachers may perceive teaching as a difficult task because of schooling conditions in Pakistan. I also assume that they may not see teaching as a very high status and highly lucrative occupation. How this relates to their motivations is part of what I explore later.

### 2.5.1 Relationship of Motivation with Background Characteristics

The expectancy-value theory, which underlies the FIT Choice model described above, states that the choices people make, and their persistence and performance in those choices depend on two factors; (a) expectations- how well will one do at that task; (b) the value (negative and/or positive) they associate with that success. The choice is also influenced by the cost associated with it as making one choice eliminates the other option Eccles, 1983 [Eccles, 1983]; Eccles, Midgley et al., 1984 [Eccles et al., 1984].

By doing so, the model takes into account the ability of an individual which is an important factor in the career choice literature Lent, Lopez et al., 1993 [Lent et al., 1993] as well as the social cognitive factors that may influence choices since values and costs associated with a choice are calculated in a certain social and cultural context. Thus, the personal attributes of a pre-service teacher such as gender, language they speak at home, the qualification and occupational status of their parents, their marital status and their prior academic ability and qualifications all interact with the social and cultural milieu they operate in. These interactions determine to a large extent the occupational choices they make (for instance in Pakistan, teaching is a more socially and culturally acceptable occupational choice for females), the value they place on those choices (for instance in

Pakistan where teaching is not a highly respected profession men high ability students may not opt for teaching), and their expectancy of success in teaching considering their prior academic performance etc. Therefore, it is important to know how different background variables determine the motivations of pre-service teachers for choosing to teach.

In a review of 44 studies conducted on the background attributes of the entering teacher candidates and their relationship with motivation to teach, career expectations, and perceptions of roles and responsibilities of teachers Brookhart and Freeman (1992) found out that most of the reviewed studies recorded background characteristics-such as gender, ethnicity, high school background and socio-economic status, of teacher candidates. However, the studies often did this only to describe their sample; such as there were more females than males in samples of elementary schools teachers Book, Freeman et al., 1985 [Book et al., 1985]; Joseph and Green, 1986 [Joseph and Green, 1986]; Pigge and Marso, 1988 [Pigge and Marso, 1988] that there were wide variations in samples based on ethnicity Book, Freeman et al., 1985 [Book et al., 1985]; West and Brousseau, 1987 [West and Brousseau, 1987]. Brookhart and Freeman (1992) found that the reviewed studies inadequately distinguished between the subpopulations; although some studies Jantzen, 1981 [Jantzen, 1981]; Knight, Duke et al., 1988 [Knight et al., 1988] did focus on finding gender influences on the reasons for choosing teaching and differences between elementary and secondary teacher motivation for choosing careers; that entering teacher candidates and noneducation majors had comparable high school grade point averages; and that entering teacher candidates are likely to come from households with lower average income than non-education majors.

Brookhart and Freeman (1992) identified the need for future studies that explore subgroup differences (like institutional differences since earlier studies were mostly based on single institution sample) since the subcategories have shown the potential to strongly influence motivations to become teachers. Later studies found out that; socio economic differences play a role in that prospective teachers at the Harvard were found to be more intrinsically driven than those from small urban public colleges Weiner, 1993 [Weiner, 1993]; females and pre-

service teachers with higher initial ability display more adaptive motives Bruinsma and Jansen [Bruinsma and Jansen, 2010]. Later in a study comparing research on the reasons prospective teachers give for choosing teaching as a profession in metropolitan (Canada, USA, UK, and Australia) versus developing countries, Bastick (2002) found out that although the reasons given for joining the teaching profession fell under one or more of the three main categories of extrinsic, intrinsic and altruistic, there were differences in the extent to which teacher trainees from different countries identified with each type of motivation.

The above mentioned review suggests a strong case using the background attributes of the prospective teacher to understand the motivation of individuals. In my study besides looking at the influence of various individual attributes (like age, gender), institutional (college vs. university) and regional (Sindh versus Punjab; rural versus urban) differences will also be explored for a complete picture.

Drawing from the above review, below I present the theoretical framework conceptualized for this study. Antecedents and correlates as established through existing literature have been put together in a framework based on my hypothesis to answer research questions.

# 2.6 Beyond the Literature: Towards a Theoretical Model

Based on the above discussion, we know that background attributes such as gender, age, prior academic ability, language spoken at home, socio-economic status (SES) measured through parental education and occupational status, and marital status are important antecedents to the variable of motivation to teach. Based on these relationships drawn from the literature, following is a graphical depiction of my theoretical model. Figure 2.2, shows the model underlying investigation of the relationship between [first and final semester prospective teachers'] background characteristics and motivational profiles for choosing teaching as a career.



Figure 2.2: Theoretical model to investigate relationship between background and motivation profiles.

		2000		2008
Pakistan	Mean Monthly	Ratio of Teacher	Mean Monthly	Ratio of Teacher
	Salary (in 2005	Salary/Salary in	Salary (in 2005	Salary/Salary in
	USD)	other	PPP USD)	other
		occupation		occupation
Teachers	230	-	303	-
Legislators	351	0.7	384	0.8
Professionals	314	0.7	360	0.8
Associate	253	0.9	303	1.0
Professional				
Clerks	239	1.0	300	1.0
Service	221	1.0	239	1.3
workers/shops				
Skilled	170	1.4	234	1.3
Agriculture				
Crafts	215	1.1	242	1.3
Plant/Machine	251	0.9	227	1.3
operators				
Elementary	172	1.3	179	1.7
All non-teachers	257	0.9	277	1.1
(weighted				
average)				

Table 2.1: Comparing teacher salaries with comparable persons in other professions

Table 2.2: Enrollment in the University and Colleges of Punjab.

Percentage	of	Nepal	Bangladesh	Bhutan	India	Pakistan	Sri Lanka
trained teacher	rs						
Primary		66	54	91	90	97	63
Lower		52	57	90	91	98	63
Secondary							
Secondary		58	50	83	89	98	63
Upper		64	42	72	93	86	63
Secondary							

# Chapter 3

# **RESEARCH METHODS**

# 3.1 Roadmap

This chapter begins by presenting the methodological approach of this study, followed by a description of research methods- identifying data collection sites and participants, and measures used to study the constructs of interest. After acknowledging the limitations of the research approach, the chapter concludes with a description of the data analysis techniques used. As mentioned before the threefold purpose of this study was to (a) examine the FIT-Choice scale in the Pakistani teacher education context; (a) investigate the relationship between background characteristics and motivational structures and perceptions of pre-service teachers; and (b) to compare the motivational structures and perceptions of entry level pre-service teachers with those of more advanced prospective teachers (first semester versus final semester).

# 3.1.1 Methodology

This study is quantitative in nature. Data was collected through survey questionnaires. The choice of methodology and associated research designs flows from my research questions. Through the research questions I sought to numerically describe who chooses to become a teacher in the three provinces of Pakistan; establish trends that explain why they choose to become a teacher; and establish relationships between background variables and motivations to become a teacher and perceptions about teaching.

Questions # 2 and 3 sought to describe who becomes a teacher in Pakistan and to establish motivational trends to become a teacher. Describing trends mean that the research question can be best answered by a quantitative study that seeks to establish the overall tendency of responses from individuals about what motivates them to teach. Survey design is used when the purpose is to establish trends in large populations. It also allows one to establish how that tendency varies across groups based on certain characteristics like age, gender, prior qualification, parental occupation etc. Results from this study inform what motivates the larger population of pre-service teachers to choose teaching as a profession, and how the motivation may change across groups of people

Creswell, 2009 [Creswell, 2009].

Correlational design was used to establish the association or relationship among variables of interest- in this case motivation, and perceptions of prospective teachers.

# 3.1.2 Survey Methodology

Survey methodology suits the data collection needs of this study very well. Surveys are used to measure beliefs, attitudes, and perception of individuals and the data collected through surveys helps provide numerical summaries, and predict relationships Creswell, 2009 [Creswell, 2009].

Another strong reason for using survey methodology is that the variables of interest in this study, i.e. motivation, is a psychological constructs as mentioned in the literature review. The dominant mode of investigation, in existing literature, for studying psychological constructs has been quantitative, and heavily based on survey methodology Tschannen-Moran, Hoy et al., 1998 [Tschannen-Moran et al., 1998]. Therefore, several valid and reliable measures that have been tested in various contexts Watt and Richardson, 2007 [Watt and Richardson, 2007]; Bruinsma and Jansen, 2010 [Bruinsma and Jansen, 2010]; Fokkens-Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012] exist for the measurement of motivation. It was expedient to adapt and use an existing instrument.

# 3.1.3 Limitations of Surveys

Surveys are self-report instruments Creswell, 2009 [Creswell, 2009]. In this study data was collected mostly on a self-reported survey questionnaire which was filled in by pre-service teachers. The reliability of student perceptions is occasionally questioned but programs are increasingly using student reported evaluations as a performance measure of their programs (e.g. the Australasian Survey of Student Engagement (AUSSE) developed by the Australian Council for Educational Research (ACER) and the National Survey of Student Engagement (NSSE) used in the USA).

There is also a growing acceptance, based on empirical evidence Marsh, 1987 [Marsh, 1987] that student evaluations are valid and reliable indicators of teaching quality. Using other measures of these variables such as observations can make the findings more valid and this is acknowledged as a limitation of survey methodology. Although, self-report data of college students has also shown to be "moderate" to "high" potential proxy as policy indicators for decision making (Ewell et al., 1993) relationships with longitudinal outcome variables such as student scores, participation in professional development activities, and practice of these prospective teachers in-service etc. can make findings more reliable.

Another limitation of findings arises from the use of cross-sectional survey design instead of longitudinal survey design. Data collected through a cross-sectional survey typically contributes to our understanding of the constructs of interest and their relationships with a snapshot at a particular point in time Creswell, 2009 [Creswell, 2009], and does not allow us to see how and when changes occur.

Despite these limitations, this design and the resulting findings allowed to present numerical and graphical summaries of background variables and motivational trends as well as allowed to find out strength and direction of relationships. Moreover, the design allowed me to use the model and scale of Watt and Richardson (2007) in the Pakistani context.

Existing research on the relationships among the constructs of interest overwhelmingly ignore qualitative

methods Tschannen-Moran and Woolfolk Hoy, 2001 [Tschannen-Moran and Hoy, 2001]. Most researchers do not situate motivational trends within the larger context within which a student opts for teaching Watt and Richardson, 2007 [Watt and Richardson, 2007]; Bruinsma and Janson, 2010 [Bruinsma and Jansen, 2010]. Comparative studies exist that look at the differences in the motivational trends across different countries Watt and Richardson et al., [Watt et al., ]; Bastick, 2002 [Bastick, 2002] such studies often lack a qualitative description of what might cause those differences. This is a limitation of the current study as well.

# 3.1.4 Methods

# 3.1.4.1 Sites and Sample

In Pakistan, the new pre-service teacher education for elementary school teachers is being conducted at two types of institutions through two different degree programs. The four year Bachelors of Education, B. Ed (Hons) is a university-based program, and the 2 year long Associate Degree in Education (ADE) is offered at government colleges known by different names in different provinces<sup>1</sup>. The population for current study was pre-service teachers enrolled in the first and final semesters of the new degree programs B. Ed (Hons) and ADE at both university and college-based teacher education programs respectively, in the provinces of Sindh, KPK, and Punjab.

At the time of data collection for this study, three universities and six colleges in Punjab were offering the new programs. In Sindh, two universities and twelve colleges were offering the new programs. Tables 2 and 3, show the breakup of sample (provincial, institution, gender, and semester wise). Enrollment trends at each institution and response rates are also given. Figure 5 shows a map to give an idea of where, across the two provinces, data collection sites are located.

Because of the small size of the population (as shown in Tables 3.1 and 3.2), in order to answer the first two questions, I planned to survey the entire population to find out their motivations to teach. Eventually, data was collected from 02 universities and 10 colleges in Sindh, 03 universities and 05 colleges in Punjab, and 02 colleges in KPK. The remaining colleges in Sindh could not be reached due to sudden deterioration of security in the province at the time of data collection. Similarly, the one remaining college in Punjab could not be visited because of final exams and semester break at the college.

The final sample consisted of N=759 new entrants (males=179; females=580); and N=178 advanced prospective teachers (males=26; females=152). Overall, N=937 prospective teachers

<sup>&</sup>lt;sup>1</sup>In Punjab the colleges are known as Government College of Elementary Teaching (GCET) In Sindh the college are known as Government Elementary College of Education (GECE) In KPK the colleges are called Regional Institutes for Teacher Education (RITE)

were surveyed consisting of 205 males and 732 females.

# 3.1.5 Enrollment Profiles in Universities in Punjab, Sindh, and KPK

University Enrollment: Enrollment numbers for prospective teachers within B. Ed (Hons) programs at each of the 03 universities in Punjab are shown in Table 3.1. High response rates show that the findings of this study provide reliable summaries for each university and college. It can also be seen from the table that enrollment numbers do not show much variation across universities. The University of Education, Bank Road campus however had the largest first year cohort (N=67) followed by University of Gujrat (N=58) and the Township campus (N=55). University of Punjab had the smallest first year cohort (N=40). University of the Punjab is the only university where the second year cohort was surveyed.

University	First	Year	Second	Year	Total Students
	Students		Students		
	R/E		R/E		R/E
IER, University of Punjab	37/40		41/50		78/90 = 86.6%
University of Education					108/122=88.5%
Township campus	48/55				
Bank Road campus	60/67				
University of Gujrat	54/58				54/58=93.1%

Table 3.1: Participant response rate (R) and enrollment (E) in universities in Punjab.

Contrary to university enrollment in Punjab, university enrollment in Sindh is small (Table 3.2). Two universities in Sindh were visited.

Table 3.2: Participant response rate (R) and enrollment (E) in universities in Sindh.

University	First	Year	Second	Year	Total Students
	Students		Students		
	R/E		R/E		R/E
University of Karachi	42/45		20/25		62/70=88.6%
University of Sindh	35		10		45

# 3.1.6 Enrollment Profiles in GCETs in Punjab and GECEs in Sindh

In Punjab, enrollment in GCETs follows almost the same pattern as the enrollment in universities (Table 3.3). There is little variation in first year enrollment sizes across four college, i.e. Shahpur Saddar, Kasoor, Faisalabad, and Lalamusa. In comparison, Bahawalpur has a much smaller first year cohort size (N=24). Second year enrollment in Faisalabad (N=82) also shows a wide variation from first year enrollment at the same college as well as in other GCETs in the sample. Faisalabad is the only GCET where a second year cohort existed at the time of data collection.

Table 3.3: Participant response rate (R) and enrollment (E) in Government Colleges for Elementary Teaching (GCETs) in Punjab.

GCET	First	Year	Second	Year	Total Students
	Students		Students		
	R/E		R/E		R/E
Shahpur Saddar	42/42				42/42=100%
Kasoor	45/48				45/48=93.7%
Faisalabad	40/40		60/82		100/122=82%
Bahawalpur	21/24				21/24=87.5%
Lalamusa	42/46				42/46=91.3%

Table 3.4 below shows that enrollment numbers in GECEs in Sindh follow a similar pattern as

in Punjab. GECE Mithi was the only college with a much smaller first year cohort (N=29).

Table 3.4: Participant response rate (R) and enrollment (E) in Government Colleges for Elementa	ıry
Teaching (GECEs) in Sindh.	

GECE	First	Year	Second	Year	Total Students
	Students		Students		
	R/E		R/E		R/E
Khairpur	20/47				20/47=42.6%
Larkana	40/50				40/50=80%
Mirpurkhas	39/49				39/49=79.6%
Mithi	29/29				29/29=100%
Sukkur	42/49				42/49=85.7%
Qasimabad, Karachi	26		19		45
Hussainabad (F), Karachi	10		23		33
Layari, Karachi	12				12
Hyderabad (F)	35		25		60

In KPK, variation in the size of first (N=30) and second (N=49) year cohorts in RITE Abbottabad exists (Table 3.5). RITE Haripur has a relatively smaller cohort size (N=25).

Table 3.5: Participant response rate (R) and enrollment (E) in Regional Institutes of Teacher Education (RITEs), KPK.

RITE	First	Year	Second	Year	Total Students
	Students		Students		
	R/E		R/E		R/E
RITE (F) Abbottabad	25/30		38/49		63/79=79.7%
RITE (M) Haripur	20/25				20/25=80%

*Gender representation:* University of Gujrat, University of Education Bank Road campus, and GCET Bahawalpur are single sex (all female) programs which explains the absence of male prospective teachers in them. However, in Punjab, enrollments within even the co-education teacher education programs, irrespective of institution type were largely female dominated (see Table 3.6 and Table 3.7). The first year cohort in Faisalabad and University of Education Township campus are the only two programs with a relatively larger male representation.

Table 3.6: Male and female representation within universities in Punjab.

University	Male / Female	Second	Year	Total Students
		Students		
IER, University of Punjab	4/33	3/38		7/71
University of Education				15/93
Township campus	15/33			
Bank Road campus	0/60			
University of Gujrat	0/54			0/54

Table 3.7: Male and Female representation in Government Colleges for Elementary Teaching (GCETs) in Punjab.

GCET	M/F First Year	M/F	Second	M/F Total
		Year		
Shahpur Saddar	9/33			9/33
Kasoor	4/41			4/41
Faisalabad	15/25	7/53		22/78
Bahawalpur	0/21			0/21
Lalamusa	6/36			6/36

Similarly, in KPK, the RITEs approached were single sex. RITE Haripur is a male only college whereas RITE Abbottabad is exclusively female. The enrolment in RITE Abbottabad is however much larger than male enrollment in RITE Haripur.

Contrary to gender representation in Punjab, colleges in Sindh have a balanced representation of male and female prospective teachers (see Table 3.8). The college in Mithi has more males enrolled than females. Table 3.8 does not show any male enrolment for the college in Khairpur because at the time of data collection the male section was not available due to another engagement.

Table 3.8: Male and Female representation in sample from universities in Sindh

University	M/F First Year	M/F	Second	M/F Total
		Year		
University of Karachi	11/30	3/17		0/22
University of Sindh	17/18	7/3		24/21

Table 3.9: Male and Female representation in sample from Government Colleges for Elementary Teaching (GCETs) in Sindh

GECE	M/F First Year	M/F	Second	M/F Total
		Year		
Khairpur	0/20			0/20
Larkana	15/25			15/25
Mirpurkhas	19/20			19/20
Mithi	17/12			17/12
Sukkur	20/22			20/22
Qasimabad, Karachi	15/11	5/14		20/25
Hussainabad (F), Karachi	0/10	0/23		0/33
Layari, Karachi	4/8			4/8
Hyderabad (F)	0/35	0/25		0/60

# 3.1.7 Procedure

Data was collected from all sites once during fall semester 2012, using the FIT-Choice scale (described in the section below on instruments).

The teacher education programs at participant universities and colleges were invited to participate in the study through their heads of department, and principals/ vice principals, respectively. There are different ways in which researchers may gain access to colleges and universities in different provinces of Pakistan. The easiest and most effective way to gain access at the universities is through the Head of the Department (in some cases a senior faculty member).

Gaining access to colleges was an interesting process. One way is to gain access through the principal or the vice principal of the college. One may know the principal already or gain access to the principal through (a) a college faculty who enjoys good rapport with the principal; (b) a faculty member or administrator at a university (especially with which the college is affiliated for degree granting purposes; (c) provincial departments that have administrative control of the colleges.

Due to the nature of my work, I was already familiar with most faculty members and administrators at the sample universities and had access for data collection. However, a formal letter was also sent explaining the purpose of this research to the head of department at each university.

Similarly, my work with the provincial departments allowed me ready access to colleges in both provinces. Again, formal letters of invitation to participate in this research were sent to the principals of each college.

In the province of Punjab, administration of colleges falls under the purview of a government office called the Directorate of Staff Development (DSD). Due to the strong bureaucratic culture of the department I had to seek formal access to the colleges in Punjab through the DSD.

I visited each site for data collection purposes, myself. First semester students enrolled in both B. Ed (Hons) and ADE programs were administered a paper survey on demographics, and motivational profiles after securing a signed copy of the consent form. Consent form indicated the purpose and importance of the study. The same survey was also administered to the more advanced (final year) students in the two programs. Data was collected after getting permission from lecturers to use their class time. Before administering the questionnaires to the participants, I stressed that participation was voluntary, guaranteed that participants' personal information would be treated confidentially and that all data would be used solely for research purposes. Survey completion took approximately 25 minutes on average.

This face to face approach maximized response rate, where I missed only those prospective teachers who were absent on the day of the survey, and helped me ensure that missing data was at a minimum.

### 3.1.8 Background Data

Demographic data (see Appendix ??) was collected by asking pre-service teachers, enrolled in both the first and final semesters, questions about: gender, age, marital status, hometown (rural/urban), and mother tongue. Data about educational and professional background was collected by asking questions such as their major in high school (arts, science, computers, or commerce), percentage of marks obtained in high school, any certification or degree obtained prior to getting admission in the new teacher education programs, any prior job experience, any prior job experience as a teacher/ level of school or tutoring. The socio-economic data about prospective teachers was collected by asking them indirect questions such as educational qualification of parents, and parents' occupation. This data was categorical in nature, where pre-service teachers will be asked to check applicable choices.

A question that I added after consulting with some principals and teacher educators at the teacher education colleges, to ensure the questionnaire covers all relevant aspects of background data, asked pre-service teachers if they were enrolled in any other degree program besides the ADE or B. Ed (Hons.). I found out that some students have dual enrollments where they are using one enrollment as a backup.

#### 3.1.9 FIT-Choice Scale to Measure Motivational Profile

In order to investigate the motivations of prospective elementary teachers for choosing teaching as a career, I used the "Factors Influencing Teaching Choice scale" (FIT-Choice scale (see Table 3.11); Watt and Richardson, 2007 [Watt and Richardson, 2007]. This scale was initially developed and validated on a large sample of 1653 (two entire cohorts of N=488; 652) Australian preservice teachers Watt and Richardson, 2007 [Watt and Richardson, 2007]. Two entire cohorts at

two university campuses were used to ensure replicability of scale validity. The sample included both men and women, and pre-service teachers being prepared for different levels of schooling.

The scale is now being used in a large scale longitudinal program of research which investigates motivations for selecting teaching as a career, teaching self-efficacy and experiences of beginning teachers in both Australia and the US<sup>2</sup>. The scale has also been used across international samples from Australia, the United States, Germany, and Norway Watt, Richardson et al., 2012 [Watt et al., ] The scale was also adapted and found to be valid and reliable by researchers from Turkey Topkaya and Uztosun, 2012 [Topkaya and Uztosun, ] who used it to find the motivations of Turkish English language teachers. The developers of the scale report on their website that researchers from Canada, Belgium, China, Malaysia, Ireland, Estonia, the Netherlands, West-Indies, India, Kenya, New Zealand, the Philippines are also using the FIT-Choice scale in order to test its validity in their own contexts (http://www.fitchoice.org/).

The original scale includes 3 main parts designed to elicit data about the motivations for choosing teaching (40 items) opening with an open ended questions: "Please state briefly your main reason for choosing to become a teacher." A 7-point likert scale is used with items rated from 1 (not important at all) and 7 (extremely important).

The scale related to career motivation includes the "intrinsic values" (individuals' interest in and desire to teach), "personal utility values" (reasons related to job security, time for family, job transferability), "social utility values" (individuals' desire to shape future of children/adolescents, enhance social equity, make social contribution, work with children/adolescents), "self perceptions of individuals' own teaching abilities" (individuals' perceptions of their teaching abilities), "fallback career choice" (individuals' selection of teaching as a career because they have not been accepted into their first choices), "socialization influences" (prior teaching and learning experiences, peers' or parents' influence on their decisions) subscales Watt and Richardson, 2007 [Watt and Richardson, 2007].

The second section collects data on perceptions about the profession titled (Beliefs about

<sup>&</sup>lt;sup>2</sup>For details visit http://www.fitchoice.org/

teaching) and has 15 items. Here respondents indicate their strength of agreement from 1 (not at all) to 7 (extremely). and career choice satisfaction (06 items). Perceptions about teaching as having a high social status, good salary, teaching as a highly demanding and requiring technical expertise etc. are explored.

The third section titled "Your Decision to Become a Teacher" has 06 items rated from 1 (not at all) to 7 (extremely) explores respondents' satisfaction with their career choice and intent to remain in teaching. I chose this scale because of:

- **Sound theoretical grounding:** The scale draws on the literature on teacher education, social cognitive theory, and career choice. It then maps most often cited reasons for choosing teaching, from a vast range of studies, on the main constructs of a current motivational model (the expectancy-value theory of motivation) which makes the scale cohesive, integrated, comprehensive, theoretically grounded, and provides a systematic approach to studying teacher motivation Watt and Richardson, 2007 [Watt and Richardson, 2007].
- **Psychometric properties:** The instrument has strong content validity as it draws from extensive literature as described earlier. The scale is based on expectancy-value theory which has established construct validity.

Convergent and divergent construct was established by developers of this instrument using Confirmatory Factor Analysis (CFA) for all factors making up the construct. Cronbach alpha reliabilities were also found to be in the acceptable range ( $\alpha = .62 - .91$ ) for each of the first and higher order constructs ( $\alpha = .44 - .81$ ).

The scale was translated in Urdu which is the national language of Pakistan, understood and spoken in all five provinces and the state of AJ&K. The survey was offered to prospective teachers in both Urdu and English for them to fill out in the language of their choice.

#### **3.1.10** Finalizing Survey

The FIT-Choice Scale was adapted by taking into account certain contextual factors arising from the introduction of the new programs. I added three additional items to the existing scale. With a prefacing statement to all items: "I chose to become a teacher because" the additional items include "we were told that after graduating from this program we will receive better salaries;" "we were told that after graduating from this program we will be hired in a better BPS scale;" (civil service scale); "we were told that we will receive scholarships if we join this program."

The second step was to revise the instruments by sharing them with the teacher educators and principals/ Heads of Departments of universities and colleges to ask their opinions about the content validity of the instrument in the Pakistani context of teacher education.

The third step was to pilot the revised instrument with two cohorts (N=80) of prospective teachers enrolled in their first and final semester of ADE and B. Ed programs respectively (Fall 2012), in the province of KPK.

The purpose of pilot was twofold;

- 1. To ascertain manageability of the scale in terms of the time and understanding of the content/ items of the questionnaires.
- 2. Identification of additional items which can also be included in the questionnaire.

From the pilot, the survey administration time seemed manageable. It took respondents 25-30 minutes to fill out the survey and about 5-7 in the beginning for me to explain how to fill out the questionnaire. Overall, the survey was well understood by the respondents and no major issues were noted.

A few minor clarifications had to be made. A number of students asked if they should enter the occupation of their father if he is a farmer or private businessman. Similarly they asked if they should enter anything for mother's occupation if she is a home maker. The answer was yes to both questions. In order to avoid missing data during the large scale data collection, I included explanation of these two background items in my instructions for filling out the survey. The only issue that was identified was picking a choice on the rating scale. As explained above the original FIT-Choice scale has a 7-point rating scale, 1 being not important at all and 7 being very important. Despite explaining how to pick intermediate choices on the chalkboard, I could tell that using a numbered 7 point scale would be problematic especially in some of the smaller colleges in my sample, and with some participants on almost all sites. Therefore, for the large scale data collection, I changed the numbered 7 point scale to a 5-point work scale, i.e. I replaced 1 with 'not important at all'; 2 with 'not important'; 3 with 'neutral'; 4 with 'important'; and 5 with 'very important'.

### 3.1.11 Limitations

This study provides a snapshot of pre-service teachers' motivation, perceptions about quality, self-efficacy, and commitment based on data on one cohort (except motivational profiles are investigated with both first and final year students) at one time. The constructs investigated in this study may change over time, and a longitudinal study that measures these constructs with the same group of people over a longer period of time may give a better picture of whether and how these constructs change over time.

For example, more information is needed on whether pre-service teachers who enter teacher training with maladaptive motives can be influenced in such a way that a maladaptive motive becomes an adaptive motive Sinclair, Dowson et al., 2006 [Sinclair et al., 2006]. This is something I intend to explore in the future.

Second, data from final semester ADE students was gathered only from a few institutions because of the timeline of the program at remaining sample institutions. The findings may not be generalizable to other colleges that may differ on the basis of geography, resources etc. Moreover, data was be collected from preservice teachers being trained to become elementary teachers so comparing results with a different population (secondary, higher secondary teachers) may not yield reliable results. Qualitative data could add depth and meaning to the numbers generated through this study but was not a part of the methodology for the current study.

Background Variables	Motivation Variables	Perception Variables
Age	Prior teaching and learning	Expertise
	experiences	
Gender	Social influence	Difficulty
Province	Social dissuasion	Social Status
Institution	Difficulty	Salary
Teacher education program	Social status	Social Dissuasion
Marks obtained	Salary	Satisfaction with Choice
Prior qualification	Perceived teaching ability	
Parental qualification	Intrinsic career value	
Parental occupation	Job security	
Time of decision	Job transferability	
Prior teaching experience	Time for family	
First choice career	Shape future of children	
Marital status	Ensuring social equity	
	Make social contribution	
	Like to work with children	
	Fallback career	

Table 3.10: Variables of Interest

# 3.1.12 Research Questions and Hypotheses

Once again the research questions of this study are:

- 1. To what extent is the FIT-Choice scale suitable for studying pre-service teacher motivations and perceptions in the Pakistani context of teaching?
- 2. What are the motivations of Pakistani preservice elementary teachers for becoming a teacher?
- 3. How are pre-service elementary teachers' background characteristics related to their motivation to become a teacher and their perceptions about teaching?
  - a) Who becomes an elementary school teacher in Pakistan?
    - What is the demographic background of elementary prospective teachers enrolled in the B. Ed (Hons) and ADE programs in the provinces of Punjab, Sindh, and Khyber Pakhtunkhwa provinces?

- ii. What is the educational and professional background of these elementary prospective teachers?
- iii. What is the socio-economic status of these elementary prospective teachers?
- b) What are the preservice elementary teachers' perceptions about teaching?
- 4. In what ways do preservice teachers at the beginning of their teaching education differ from preservice teachers at the end of their teaching education in their motivations for becoming a teacher and their perceptions of teaching?

Hypothesis was specified in relation to the third and fourth research question.

I hypothesized that certain subgroups (females, ADE students, those with teachers as parents, and those with prior teaching experience) will display higher levels of intrinsic and social utility motivations and display more satisfaction with their choice of teaching. Whereas, males, B. Ed (Hons) enrollees, those with no prior teaching experience, and with non-teacher parents will display higher scores of extrinsic or personal utility related and fallback career motivations and display low satisfaction with their choice of teaching.

I also hypothesised that preservice teachers at the beginning of their teacher education would differ from preservice teachers at the end of their teacher education in terms of their perceptions about teaching, especially satisfaction with choice. I expected that advanced preservice teachers would have gained more teaching experience during their teaching education. They would have had more examples on how to teach and support from peers and faculty to increase their satisfaction with choice of teaching. I also expected advanced students to be more intrinsically driven than entry level teachers, and have higher scores on ability and social contribution related factors. I expected first year students to be driven more by fallback career or other personal utility related factors. This hypothesis is based on the general perception about teaching as a last resort choice in Pakistan. My expectation was that since final year students have experienced the program and have been through some practicum experience they would now be more intrinsically driven because of these experiences.

#### 3.1.13 Methods of Analysis

In order to assess the FIT-Choice scale in the Pakistani context two exploratory factor analyses were conducted (on half of the study sample) using image factoring and oblimin rotation (delta = 0) as per the analyses in Watt and Richardson, 2007 [Watt and Richardson, 2007], the original authors of the FIT-Choice scale. The basic assumptions for factor analysis were assessed. First, the Kaiser-Meyer-Olkin value, which generally indicates whether the variables can be grouped into a smaller set of underlying factors, exceeded the recommended value of .60 or above. Second, Bartlett's Test of Sphericity reached statistical significance which supports the factorability of the correlation matrix.

I decided on the number of factors to retain based on the scree plot, factor interpretability and acceptable Cronbach's alpha measures of reliability.

Confirmatory factor analyses (CFAs) were performed on the other half of the sample to see model fit. Two maximum likelihood CFAs assessed model fit for the 6 motivations factors and 5 perceptions factors, respectively. In each CFA, items were assigned to load only on their respective factors, error variances were estimated, no error covariances specified and latent correlations were freely estimated. Because the FIT-Choice scale had been translated into Urdu and used in this different cultural setting from the Australian context in which it was initially validated, close attention was paid to the incremental fit indices, particularly the modification indices.

In order to answer question 2 and 3, first, simple descriptive statistics were generated. Mean scores were calculated for each motivation for both entry level and advanced cohorts, and for different subgroups based on background variables. Graphical representations (column charts and pie graphs) were used to visually present data on variables like age, Parent occupation and education, educational profiles (marks obtained in higher secondary school and other certification/degrees), previous teaching experience, and time of decision to join teaching.

Second, to determine the differences between various subgroups (including differences in the entry and advanced level cohorts) on motivations and perceptions, one-way multivariate analyses of variance (MANOVAs) were conducted. Follow-up Analysis of variance (univariate) (ANOVA) for the Multivariate analyses of variance (MANOVAs) compared motivations and perceptions for subgroups with more than 2 categories. Independent sample t-tests were conducted to find out differences in motivations and perceptions between those with a science and non-science background.

Pearson correlation was used to examine relationship between various motivations and perceptions.

Higher-order factor	Factor	Item #		Anchors
			Part B: Influential factors	
			Item stem: "I chose to become	
			a teacher because"	
N/A	Ability	В5	I have the qualities of a good	I (not
			teachers	all important),
				to 7
		B19	I have good teaching skill	(extremely
				important)
		B43	Teaching is a career suited to	
			my abilities	
N/A	Intrinsic	B1	I am interested in teaching	
	career			
	value			
		B7	I've always wanted to be a	
			teacher	
		-	Continu	ied on next page

Table 3.11: Items in the original FIT-Choice Scale.

Higher-order factor	Factor	Item #		Anchors	
		B12	I like teaching		
N/A	Fallback	B11	I was unsure of what career I		
	career		wanted		
		B35	I was not accepted into my		
			first-choice career		
		B48	I chose teaching as a last-		
			resort career		
Personal	Job se-	B14	Teaching will offer a steady		
utility	curity		career path		
value					
		B27	Teaching will provide a		
			reliable income		
		B38	Teaching will be a secure job		
	Time	B2	Part time teaching could allow		
	for		more family time		
	family				
		B16	Teaching hours will fit with		
			the responsibilities of having a		
			family		
Continued on next page					

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors	
		B29	School holidays will fit in		
			with family commitments		
		B4	As a teacher I will have		
			lengthy holidays		
		B18	As a teacher I will have a short		
			working day		
	Job	B8	Teaching will be a useful job		
	trans-		for me to have when travelling		
	ferabil-				
	ity				
		B22	A teaching qualification is		
			recognized everywhere		
		B45	A teaching job will allow me		
			to choose where I wish to live		
Social	Shape	B9	Teaching will allow me		
utility	future		to shape children/adolescent		
value	of chil-		values		
	dren/ado	lescents			
		B23	Teaching will allow me to		
			influence the next generation		
Continued on next page					

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors	
		B53	Teaching will		
			allow me to have an impact on		
			children/adolescents		
	Enhance	B36	Teaching will allow me to		
	social		raise the ambitions of under-		
	equity		privileged youth		
		B49	Teaching		
			will allow me to benefit the		
			socially disadvantaged		
		B54	Teaching		
			will allow me to work against		
			social disadvantage		
	Make	B6	Teaching will allow me to		
	social		provide a service to society		
	contri-				
	bution				
		B20	Teachers make a worthwhile		
			social contribution		
		B31	Teaching enable me to 'give		
			back' to society		
	Continued on next page				

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors	
	Work	B13	I want a		
	with		job that involves working with		
	chil-		children/adolescents		
	dren/				
	adoles-				
	cents				
		B26	I want to work		
			in a child/adolescent-centered		
			environment		
		B37	I like working with		
			children/adolescents		
N/A	Prior	B17	I have had inspirational		
	teach-		teachers		
	ing and				
	learn-				
	ing				
	experi-				
	ences				
		B30	I have had good teachers as		
			role-models		
		B39	I have had positive learning		
			experiences		
Continued on next page					

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors
N/A	Social	В3	My friends think I should	
	influ-		become a teacher	
	ences			
		B24	My family think I should	
			become a teacher	
		B40	People I've worked with think	
			I should become a teacher	
			Part C: Beliefs about teaching	
Task	Expertise	e C10	Do you think teaching	I (not at all), to
de-			requires high levels of expert	7 (extremely)
mand			knowledge?	
		C14	Do you think teachers	
			need high levels of technical	
			knowledge?	
		C15	Do	
			you think teachers need highly	
			specialized knowledge?	
	Difficult	y C2	Do you think teachers have a	
			heavy workload?	
		C7	Do you think teaching is	
			emotionally demanding?	
Continued on next page				

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors
		C11	Do you think teaching is hard	
			work?	
Task	Social	C4	Do you believe teachers are	
return	status		perceived as professionals?	
		C8	Do you believe teaching is	
			perceived as a high-status	
			occupation?	
		C12	Do you believe teaching is a	
			well-respected career?	
		C5	Do you think teachers have	
			high morale?	
		C9	Do you think teachers feel	
			valued by society?	
		C13	Do you think	
			teachers feel their occupation	
			has high social status?	
	Salary	C1	Do you think teaching is well	
			paid?	
		C3	Do you think teachers earn a	
			good salary?	
			Continu	ied on next page

Table 3.11 – (cont'd)

Higher-order factor	Factor	Item #		Anchors
			Part D: Your decision to	
			become a teacher	
N/A	Social	D2	Were you	I (not at all), to
	dissua-		encouraged to pursue careers	7 (extremely)
	sion		other than teaching?	
		D4	Did others tell you teaching	
			was not a good career choice?	
		D6	Did others influence you to	
			consider careers other than	
			teaching?	
N/A	Satisfact	idadð 1	How carefully have	
	with		you thought about becoming a	
	choice		teacher?	
		D3	How satisfied are you with	
			your choice of becoming a	
			teacher?	
		D5	How happy are you with your	
			decision to become a teacher?	

Table 3.11 – (cont'd)
# Chapter 4

# DATA ANALYSIS

This chapter begins with an examination of the FIT-Choice scale in the Pakistani teacher education context. It then describes who joins teacher education in Punjab, Sindh, and KPK provinces of Pakistan. Biographical data is reviewed on gender, age, parental occupations and academic achievement, students' educational quali?cations, and prior teaching experiences as well as the timing of their decision to choose teacher education and first career choice.

Next, some insights into prospective teachers' motivations for choosing teaching and perceptions about the teaching profession are presented. Finally, comparisons are made between entering and advanced prospective teachers on their motivations and perceptions. Analysis of responses to the single open ended question "What was your primary reason for choosing teaching?" is presented at the end.

## 4.1 Results

#### 4.1.1 Scale Validation: Motivation Factors

The 27 items of the modified FIT-Choice motivation subscales were subjected to an exploratory factor analysis by randomly selecting half of the sample cases. The eigenvalue > 1 guideline indicated a solution of 5 factors (explaining 55.1% of the variance) on which several items did not have their highest loadings. Also the 5th factor did not load any items. An inspection of scree plot in Figure 4.1 suggested a 4 or 7 factor solution.

Based on the scree plot, a four factor structure was specified. Again the fourth factor did not load any items. Moreover, items pertaining to fallback career loaded on factor containing other personal utility factors but also crossloaded without much explanation.

After dropping fallback career items, as well as items B8, B34, B35, and B36 (due to very low loadings) a three factor structure was specified (explaining 45.63% of the variance) which resulted in maximum loading of items and no cross loadings. The pattern and structure matrix is show in Table 4.1 for the three factor solution.

# Scree Plot



Figure 4.1: Scree plot showing a four factor solution

Table 4.1: Pattern a	nd structure	(P/S)	matrix fo	or motivation	constructs
	nu su ucture	( <b>1</b> , <b>0</b> )	inaura r	or mouvation	constructs

No.	Items	Factor 1	Factor 2	Factor 3
B6	I've always wanted to be a teacher	.753/.666	102/020	120/.322
B1	I am interested in teaching	.690/.669	154/063	.000/.395
B31	My school experiences led me to	.640/.679	037/.058	.071/.454
	choose teaching			
B25	I have had good teachers as role-	.630/.636	.089/.171	008/.387
	models			
B16	I have had inspirational teachers	.618/.662	.021/.113	.068/.445
			Continued	on next page

No.	Items	Factor 1	Factor 2	Factor 3	
B12	I like teaching	.584/.603	080/.004	.049/.392	
B32	People I've worked with think I	.526/.563	.093/.168	.041/.374	
	should become a teacher				
B22	I want to work in a child/adolescent-	.439/.565	.113/.198	.182/.465	
	centered environment				
B13	I like working with children /	.436/.559	.056/.141	.192/.464	
	adolescents				
B3	My friends think I should become a	.390/.423	.127/.183	.026/.281	
	teacher				
B21	My family thinks I should become a	.300/.360	.239/.285	.046/.262	
	teacher				
B15	Teaching hours will fit with the	.028/.084	.543/.543	026/.069	
	responsibilities of having a family				
B14	I will get a job where I can't get fired	004/.058	.538/.536	015/.061	
B24	School holidays will fit in with my	101/043	.537/.520	021/005	
	family commitments				
B2	Part-time teaching could allow more	.018/.052	.450/.447	042/.034	
	family time				
B23	Teaching will provide a reliable	.053/.168	.388/.410	.104/.192	
	income				
B20	Teaching will allow me to influence	074/.309	.007/.088	.631/.587	
	the next generation				
B29	Teaching enables me to 'give back' to	.050/.411	036/.058	.602/.627	
	society				
	Continued on next page				

**Table 4.1 – (cont'd)** 

No.	Items	Factor 1	Factor 2	Factor 3
B18	Teachers make a worthwhile social	108/.235	.031/.097	.560/.499
	contribution			
B9	I want to help children / adolescents	.092/.417	.043/.131	.527/.589
	learn			
B30	Teaching will allow me to raise the	.097/.382	.005/.085	.470/.529
	ambitions of underprivileged youth			
B5	Teaching allows me to provide a	.086/358	049/.029	.458/.504
	service to society			
B4	I have qualities of a good teacher	.235/.464	048/.039	.389/.524
B17	I have good teaching skills	.247/.450	062/.021	.349/.490

**Table 4.1 – (cont'd)** 

An inspection of Table 4.1 shows Factor 1 loaded all items related to the original 'intrinsic career value', two items from 'work with children', the original 'social influence' and 'prior teaching and learning experiences.' Factor 2 loaded the original 'job security' and 'time with family.' I called this factor personal utility factors as these factors comprise the higher order FIT-Choice factor by that name Watt and Richardson, 2007 [Watt and Richardson, 2007]. Factor 3 loaded the original 'ability', 'make social contribution', one item of 'enhance social equity', and 2 items of 'shape future of children.' I called factor 3, social utility values, the higher order construct in the FIT-Choice scale. Despite low loading of items related to fallback career and problematic Cronbach value, the factor was retained in further analysis for the sake of comparison with other studies as well as because I believe that the factor is important in the Pakistani context.

To determine whether combined factors could be further separated into their theorized components, subsequent factor analyses explored the three combined factor sets. In each case, component factors could be distinguished. Based on scree plot 4.2inspection and eigenvalues

exceeding 1 (explaining 53.91% of the variance) factor 1 was further decomposed into the original 'social influence', and a combined 'prior teaching and learning experiences', 'intrinsic career value', and 'work with children' which I named intrinsic values. Scree plot and factor loadings are shown in Figure 4.2 and Table 4.2 below.



Scree Plot

Figure 4.2: Scree plot shows a five factor solution

Table 4.2: Pattern and structure (P/S) matrix: Motivation subscale Factor 1.

No.	Items	Intrinsic	Social Influence
B12	I like teaching	.787/.729	084/.464
B1	I am interested in teaching	.755/.686	100/.426
Continued on next page			

No.	Items	Intrinsic	Social Influence
B6	I've always wanted to be a teacher	.670/.672	.004/.470
B16	I have had inspirational teachers	.470/.620	.214/.542
B13	I like working with children / adolescents	.446/.526	.114/425
B31	My school experiences led me to choose	.424/.607	.263/.558
	teaching		
B25	I have had good teachers as role-models	.358/.581	.280/.570
B22	I want to work in a child / adolescent-centered	.316/.473	.226/.446
	environment		
B32	People I've worked with think I should	.050/.448	.572/.607
	become a teacher		
B3	My friends think I should become a teacher	015/.354	.531/.521
B21	My family thinks I should become a teacher	.007/.267	.375/.379

**Table 4.2 – (cont'd)** 

For factor 2, eigenvalues greater than 1 gave a one factor solution explaining 42.44% of the variance. However, the scree plot 4.3 gave a two factor solution. Again, for the sake of interpretability and comparison across other studies, the scree plot solution was adopted. Factor 2 was decomposed into the original 'time with family' and 'job security.'

Table 4.3: Pattern and structure (P/S) matrix: Motivation subscale Factor 2.

No.	Items	Time for Family	Job Security
B2	Part-time teaching could allow more	.922/.855	203/.100
	family time		
		Continue	d on next page

No.	Items	Time for Family	Job Security
B15	Teaching hours will fit with the	.713/.775	.187/.422
	responsibilities of having a family		
B24	School holidays will fit in with my	.494/.610	.250/.513
	family commitments		
B14	I will get a job where I can't get fired	077/.188	.806/.780
B23	Teaching will provide a reliable	.084/.311	.690/.717
	income		

**Table 4.3 – (cont'd)** 

For factor 3, both the eigenvalues greater than 1 solution (explaining 51.287 of the variance) and scree plot 4.4 identified a two factor solution.

So, Factor 3 was decomposed into ability, and a combined original 'make social contribution' one item of 'enhance social equity', and 2 items of shape future of children.'

No.	Items	Make Social Contribution	Ability
B29	Teaching enables me to 'give back' to	.616/.569	056/.487
	society		
B20	Teaching will allow me to influence	.583/.585	.003/.455
	the next generation		
B30	Teaching will allow me to raise the	.527/.521	007/.430
	ambitions of underprivileged youth		
B18	Teachers make a worthwhile social	.466/.469	.004/.459
	contribution		
		Continued o	n next page

Table 4.4: Pattern and Structure (P/S) matrix for motivation subscale factor 3.

No.	Items	Make Social Contribution	Ability
B5	Teaching allows me to provide a	.394/.504	.132/.390
	service to society		
B9	I want to help children / adolescents	.320/.448	.080/.212
	learn		
B17	I have good teaching skills	016/.463	.445/.516
B4	I have qualities of a good teacher	.112/.354	.423/.432

**Table 4.4 – (cont'd)** 

For analysis purposes, all factor scores were calculated by taking the mean of scores on all items loading on the corresponding factor. A CFA for the resulting 6 factor solution yielded acceptable global fit indices on the other half of the sample: Normal theory weighted least squares chi-square= 414.153, df= 231, RMSEA= .057, CFI= .922, TLI= .907, SRMR= .057. Table presents Cronbach alpha measures of internal consistency for each subscale.

## 4.2 Validity of Perceptions Scale

The CFA for the six perception factors yielded acceptable global fit indices: normal theory weighted least squares chi-square= 343.631, df= 137, RMSEA= .047, CFI=.958, TLI= .948, SRMR= .044. However, an image extraction and oblimin rotation exploratory factor analysis produced a five factor solution based on eigenvalues greater than 1 (explaining 65.234% of the variance). An inspection of scree plot 4.5 revealed a 3, 5, and 6 factor solution. So, a 5 factor solution was used.

Items C5 and C10 were dropped because of low loading on all factors. The final pattern and structure matrix is shown in table below.

## Scree Plot



Figure 4.3: Scree plot shows a two factor solution

As shown in the Table 4.5, the first factor is identical to the original satisfaction with choice. The second factor is the original social status. Third factor is the original social dissuasion. Fourth factor is the higher order task demand (containing both expertise and difficulty items), and fifth factor is the original salary factor.

# Scree Plot



Figure 4.4: Scree plot shows a two factor solution

Table 4.5: Pattern and	l Structure (P/S	) matrix for	perceptions construct
		/	

No.	Items	Satisfaction	Social	Social	Task	Salary
		with	Status	Dissuasion	Demand	
		Choice				
D3	How satisfied	.860/.863	-	.016/.148	.021/.348	-
	are you with your		.021/.208			.006/.286
	choice of becoming a					
	teacher?					
				(	Continued on	next page

No.	Items	Satisfaction	Social	Social	Task	Salary
		with	Status	Dissuasion	Demand	
		Choice				
D5	How happy are you	.852/.853	.018/.234	.000/.124	-	.011/.305
	with your decision to				.020/.333	
	become a teacher?					
D1	How carefully have	.775/.792	-	.008/.125	.032/.338	.021/.290
	you thought about		.018/.210			
	becoming a teacher?					
C9	Do you think	054/.111	.705/.673	019/174	-	-
	teachers feel valued				.024/.340	.017/.301
	by society?					
C8	Do you	.017/.222	.653/.648	010/062	-	-
	believe teaching is				.021/.388	.007/.331
	perceived as a high-					
	value occupation?					
C11	Do you believe	.036/.175	.641/.644	.070/145	.020/.346	.003/.311
	teaching is a well-					
	respected career?					
C12	Do you	036/.165	.577/.623	.036/098	.088/.404	.029.330
	think teachers feel					
	their occupation has					
	high social status?					
				С	ontinued on	next page

Table 4.5 – (cont'd)

No.	Items	Satisfaction	Social	Social	Task	Salary
		with	Status	Dissuasion	Demand	
		Choice				
C4	Do	.038/.141	.338/.412	100/172	.017/.251	.068/.261
	you believe teachers					
	are perceived as					
	professionals?					
D6	Did others influence	.027/.128	.029/-	.573/.569	.002/.013	.021/.000
	you		.075			
	to consider careers					
	other than teaching?					
D2	Were	.111/.201	.040/-	.537/.545	.001/.044	-
	you encouraged to		.046			.004/.012
	pursue careers other					
	than teaching?					
D4	Did others tell you	078/047	053/-	.337/.337	007/-	007/-
	teaching was not a		.152		.084	.089
	good career choice?					
C6	Do you think	025/.243	.004/.385	010/061	.548/.577	-
	teaching is a highly					.003/.258
	skilled occupation?					
C7	Do	.015/.191	.083/.302	023/037	.521/.539	.007/.204
	you think teaching is					
	emotionally					
	demanding?					
				С	ontinued on	next page

Table 4.5 – (cont'd)

No.	Items	Satisfaction	Social	Social	Task	Salary
		with	Status	Dissuasion	Demand	
		Choice				
C13	Do you think	.026/.204	.008/.254	.018/.004	.481/.475	-
	teachers need high					.050/.149
	levels of technical					
	knowledge?					
C2	Do	.001/.185	-	.001/014	.439/.440	.056/.208
	you think teaching is		.039/.232			
	hard work?					
C1	Do	.016/.188	-	.024/062	.004/.229	.573/.577
	you think teaching is		.005/.297			
	well paid?					
C3	Do you think	011/.216	.018/.276	012/017	.005/.229	.570/.575
	teachers earn a good					
	salary?					

**Table 4.5 – (cont'd)** 

A final CFA which omitted the 2 items C5 and C10 and combined expertise and difficult items improved the global measures of model fit: normal theory weighted least squares chi square= 232.445, df= 109, RMSEA= .040, CFI= .971, TLI= .964, SRMR= .041.

Cronbach alpha values for all subscales are given in the Table 4.6 below. Job security and fallback career have problematic Cronbach alpha values as low as  $\alpha = .563/.571$  and .499, respectively. However, these factors are kept in further analysis for the sake of comparison with other studies and because of their importance in explaining motivations for choosing teaching in the Pakistani context. Descriptive statistics on individual items are included in appendix.

# Scree Plot



Figure 4.5: Scree plot shows a five factor solution

Factors	No. of Items	Cronbach	Cronbach
		alpha (New	alpha
		Entrants)	(Advanced)
Intrinsic values	08	.865	.827
Social influences	03	.644	.714
Time for family	03	.639	.704
Job security	02	.563	.571
		Cor	tinued on next page

 Table 4.6: Cronbach alpha values for all subscales

Factors	No. of Items	Cronbach	Cronbach
		alpha (New	alpha
		Entrants)	(Advanced)
Fallback career	03	.499	.499
Make social contribution	06	.654	.887
Ability	02	.614	.856
Task demand	04	.722	.921
Social status	05	.787	.884
Salary	02	.752	.661
Social dissuasion	03	.663	.651
Satisfaction with choice	03	.921	.941

**Table 4.6 – (cont'd)** 

## 4.3 Who Chooses to Become a Teacher in Sindh and Punjab

## 4.3.1 Gender representation

As the sample composition in chapter 3 suggests, overall enrollments as well as those within each teacher education program and institution were largely female dominated, also shown in Figure 4.6. The only exceptions were GECE Mithi in Sindh; and RITE Haripur which is an all male college.

## 4.3.2 Age profiles

Age profiles do not differ much across gender (see Figure 4.7). The median age in years in the first year of enrollment was 19 for females and 20 for males. Age distributions have a similar



Figure 4.6: Gender profile

spread across females (interquartile range spanning 18 to 20 years) and males (interquartile range spanning 19 to 21 years). Females tend to be somewhat younger than males.

Note: The box length is the interquartile range and the solid bar represents the median value. "o" denotes outliers with values between 1.5 and three box lengths from the upper or lower edge of the box. There are no extreme cases with values more than three box lengths from the upper or lower edge of the box in this case.

Although median age in years does not differ much across provinces, median age being 20 in both KPK and Sindh. and 19 years in Punjab. Age profiles tend to be more interesting across provinces (see Figure 4.8). First year prospective teachers in KPK had the most clustered ages (interquartile spanning 20-21 years), followed by similar age distribution spread in Sindh (interquartile range spanning from 19-21 years) and in Punjab (interquartile range spanning from 18-20 years).

### 4.3.3 Parental Qualifications and Job Profiles

Prospective teachers come from households where generally fathers have higher qualification than mothers. 20% fathers have a bachelors degree as compared to only 9% mothers. 17% fathers have



Figure 4.7: Age across gender.

a masters degree as compared to 4% mothers. 23% of mothers are uneducated as compared to 7% fathers. 34% mothers have not complete secondary or higher secondary school as compared to 28% fathers. 25% mothers have completed higher secondary school as compared to 17% fathers.

Regarding parents' professions, an overwhelming majority (87%) of mothers is homemakers, followed by 10% who are teachers, a few principals, and lecturers, and 4% involved in other occupations such as tailor, Quran tutor (*muallima*), lady health worker, laborer, farmer, nurse, and doctor.

For fathers' professions, the most frequently occurring occupations for fathers were: 18% government servants (mostly engaged in clerical jobs, police constables, office accountants; only



Figure 4.8: Age across provinces.

a few identified fathers working in manager level positions); 17% business; 16% teachers; 11% farmers; 8% highly skilled professionals (doctors, engineers, architects, banker, lawyers); 9% unskilled labor (laborers, contractors, watchman, NGO worker); 4% are shopkeepers; another 4% were identified as private job holders; 3% are engaged in skilled labor.

### **4.3.4 Education Profile of Entrants**

41.2% of all prospective teachers (662) who responded to the question "what is the percentage of marks obtained in intermediate (Higher secondary school)?" scored between 60-69.99% (a grade point average of 3.5), followed by 26.14% of those who scored between 50-59.99% (3point),

followed by 25% of those who scored between 70-79.99% (4point). A very small percentage (3.95%) reported scores between 80% and above, followed by (2.96%) who lie in the range of 40-49.99% (2point), followed by 0.7% who scored between 33-39.99%. Six respondents (0.7%) scored between 33-39.99% 9 (1point).

Comparison between the two different program types/ institutions (B. Ed (Hons) university vs. ADE government colleges) revealed that although a majority of prospective teachers in both types of programs/ institutional types indicated scores between the range of 60-69.99%, a relatively higher percentage (43.4%) of those enrolled in B. Ed (Hons) reported scores in this range as compared to those enrolled in ADE (40.4%). A relatively higher percentage (24.3%) in B. Ed (Hons) reported obtaining marks between 70-79.99% as compared with 20.8% in ADE. The percentage of prospective teachers in B. Ed (Hons) who obtained marks between 50-59.99% was 28.3% and of those enrolled in ADE was 30.8%. Very few in both types of programs (2.7% in ADE and 2.6% in B. Ed (Hons)) reported having scored above 80%. Whereas 4.1% ADE students reported scoring between 40-49.99% as compared to 1.3% in B. Ed (Hons). 1.2% in ADE programs reported scores in the lowest range of 33-39.99%.

The following table shows marks obtained by province. Note that a higher percentage of prospective teachers (40.5%) in Punjab scored in the range 60-69.99% followed by 31.1% in KPK and 30.1% in Sindh. 6.7%. KPK has higher representation in both extreme categories.

Percentage of Marks Obtained	Punjab	Sindh	KPK
33-39.99% (1 point)	0.5	1.3	2.3
40-49.99% (2 point)	4.7	0.9	6.8
50-59.99% (3 point)	30.5	27.7	40.9
60-69.99% (3.5 point)	43.1	39.6	31.8
70-79.99% (4 point)	19.6	26.8	11.4
80-89.99% (5 point)	1.6	3.8	6.8

Table 4.7: Marks obtained by province

An analysis of marks obtained by gender showed that more females (42.2%) than males (36.8%) lie in the 60-69.99% range. Also, more females (23.4%) lie in the 70-79.99% range than males (15.8%). More males (39.5%) lie in the lower range of 50-59.99% as compared to



Figure 4.9: Job experience of entrants.

27.5% females. An almost equal and much lower percentage of both males (3.3%) and females (3.5%) lie in the 40-49.99% range. The percentage of both males (2.6%) and females (2.8%) in the 80-89.99% range was very small as well.

Majority of entrants joined teacher education after finishing higher secondary school (HSS) (n=468; 76%). Out of the 468 who joined after HSS 293 came from the social sciences and humanities track and 175 came from the sciences. Almost 12% (n=75) entrants earned a teaching certificate (PTC=39; CT=33) or teaching degree (M. Ed) before joining the teacher education program. 6% of entrants (n=42) came after earning a bachelors degree and n=6 held a masters degree.

#### 4.3.5 Previous work experience of prospective teachers

When asked if prospective teachers had prior work experience only 8% reported that they had worked prior to entering teacher education. An overwhelming majority indicated having no prior work experience. Interestingly, when followed up by the question "have you taught before?" 26% reported having taught in some capacity.

Out of the 26% a vast majority (59%) said they worked as a tutor either at home or at a tuition center. One reason for not reporting a previous teaching or work experience despite having taught tuitions is that teaching tuitions is considered an additional source of income and not necessarily a job or career. This was followed by 18% who worked as primary teachers; followed by 14% who worked as middle school teachers, and 8% who worked as secondary school teachers. Several of those who reported having teaching experience at a formal school indicated that they worked at a private school.

#### 4.3.6 Time of decision to enter teacher education

In order to gain some insight into the decision making process of prospective teachers to enter teacher education, they were asked to indicate when they decided that they wanted to enter teacher education. 53% responded that they decided after finishing higher secondary school. We know from the finding above that almost 44% of prospective teachers applied for another program before pursuing teacher education. This explains to an extent why prospective teachers waited until after finishing higher secondary school to decide to enter teacher education. This interpretation makes sense as majority of those who enter higher secondary school have already decided their career track by opting for pre-engineering or pre-medical tracks. If they cannot enter a program of their choice following higher secondary education they opt for second choice programs. 26% reported that they had decided to pursue teaching before finishing higher secondary schooling. 9% indicated that they decided to get into a teacher education program during their bachelors program. 12% indicated that they decided to join teacher education at other times. Some examples include; decided when I was a child; after entering the ADE program; by chance/accidently; one year after pursuing pre-medical; after getting a Certificate for Teaching (CT); after failing the medical entry test; after seeing the advertisement for the new ADE program; after passing the entry test for ADE; never decided just came; have always wanted to; I don't want to be a teacher at all.

#### 4.3.7 First choice of program/career

Out of the 917 prospective teachers 44.6% of respondents reported that before opting for their current teacher education program they had applied to a different program. When asked to specify, an overwhelming number (72%) said that they applied for admission in a bachelors degree program; followed by 7% who applied to medical schools; followed by 5% who applied to the one year B. Ed program; followed by 4% of those who applied to engineering. 12% indicated that they applied to 'other' programs including joining the madrassah (religious school); Mphil program; textile design; nursing; police; Diploma IT; Primary Teaching Certificate; air force; computers; masters program; and law.

## 4.4 Why Choose Teaching in Pakistan?

#### 4.4.1 Motivations for teaching among new entrants

Overall, among the new entrants (N=761) highest rated motivation for choosing teaching was social contribution (M=4.5, SD=.57); followed by ability (M=4.12, SD=0.9); followed by intrinsic (M=3.99, SD=.88); job security (M=3.38, SD=1.45); social influences (M=3.25, SD=1.03); and the lowest rated motivations were both fallback career and time for family (M=3.16, SD=1.02).

#### 4.4.2 Subgroup differences in motivations to teach

In order to determine if any systematic differences exist among various subgroups of new entrants based on variables such as gender, program type, parental occupation (teacher or not), marks obtained in intermediate, province, career choice, time of decision to become a teacher, and prior teaching experience, MANOVAs and follow-up ANOVAs were carried out for all motivational factors. Table presents a summary of all descriptive and inferential statistics from these tests.

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
	Gender						
Male	4.36 (.76)	4.6(.43)	3.16(1)	2.8(1)	2.8(1)	4.2(.87)	3.21(1)
Female	4.1 (.78)	4.5(.55)	3.43(1)	3.3(.99)	3.3(.99)	4(.88)	3.3(1)
F(1,565)	11.88	4.232	6.31	21.076	21.076	5.25	1.003
partial	.021	.007	.011	.036	.036	.009	.002
p-value	.001	.040	.012	.000	.000	.022	.317
	Program						
	type						
ADE	4.2 (.79)	4.5(.51)	3.43(1)	3.18(1)	3.18(1)	4.1(.88)	3.35(1)
В.	3.94(.7)	4.48(.63)	2.88(1)	3.0(1)	3.0(1)	3.7(.84)	2.8(.98)
Ed(Hons)							
F(1,565)	7.014	.353	17.108	1.610	1.610	12.121	21.208
partial	.012	.001	.029	.003	.003	.021	.036
p-value	.008	.553	.000	.205	.205	.001	.000
	Province						
Punjab	4.17(.79)	4.5(.58)	3.4(1)	3.3 (1)	3.3(1)	4(.96)	3.3(1)
Sindh	4.14(.79)	4.5(.47)	3.2(1)	2.99(1)	2.99(1)	4.1(.78)	3.2(1)
КРК	4.26(.82)	4.5(.48)	3.69(1)	3.1 (1.1)	3.1(1.19)	4.1(.9)	3.61(.92)
					С	ontinued on	next page

 Table 4.8: Descriptive statistics and inferential statistics for motivation among first year prospective teachers.

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
F(2,564)	.382	.007	4.593	5.088	5.088	.341	2.311
partial	.001	.000	.016	.018	.018	.001	.008
p-value	.683	.993	.011	.006	.006	.711	.100
	Parent						
	Оссира-						
	tion						
Parent is	4.15(.84)	4.41(.53)	3.5(1)	3.3(.99)	3.3(.96)	4(.99)	3.35(1.11)
teacher							
Parent is	4.16(.77)	4.54(.52)	3.3(1.1)	3.1(1)	3.1(1)	4(.85)	3.24(1)
not teacher							
F(1,564)	.015	5.919	3.035	4.581	4.581	.041	1.202
partial	.000	.010	.005	.008	.008	.000	.002
p-value	.902	.015	.082	.033	.033	.839	.273
	Decision						
	Time						
Before	4.31(.73)	4.49(.52)	3.13(1)	2.9(1)	2.9(1)	4.4(.62)	3.5(1)
FA/FSc							
After	4.1(.8)	4.6(.51)	3.44(1)	3.28(.98)	3.28(.98)	3.96(.87)	3.2(1)
FA/FSc							
					С	ontinued on	next page

Table 4.8 – (cont'd)

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
During	4.05(.83)	4.47(.58)	3.6(1)	3.24(1.18)	3.24(1.18)	4.3(.75)	3.34(.98)
BA/BSc							
Any other	4.08(.82)	4.42(.57)	3.31(1.13)	3.15(1)	3.15(1)	3.7(1.1)	3(1)
F(3,558)	2.466	1.499	3.098	4.824	4.824	14.882	3.678
partial	.013	.008	.016	.025	.025	.074	.019
p-value	.061	.214	.026	.003	.003	.000	.012
	First						
	career						
	choice						
Yes	4.15 (.8)	4.5(.53)	3.37(1.1)	3.3(1)	3.3(1)	3.8(.96)	3.2(1)
No	4.2 (.77)	4.5(.53)	3.33(1)	3.0(1)	3.0(1)	4.21(.79)	3.35(1)
F(3,548)	.097	.349	.188	3.224	3.224	9.95	1.792
partial	.001	.002	.001	.017	.017	.052	.010
p-value	.962	.790	.904	.022	.022	.000	.148
	Teaching						
	Experi-						
	ence						
Yes	4.24(.73)	4.54(.48)	3.25(1)	3.1(1)	3.1(1)	4.2(.86)	3.45(1)
No	4.12(.81)	4.5(.55)	3.4(1)	3.2(1)	3.2(1)	3.98(.89)	3.18(1)
F(1,562)	2.817	.455	2.170	2.394	2.394	8.685	7.665
					Co	ontinued on	next page

Table 4.8 – (cont'd)

Motivations	Ability	Social Contrib.	Job Sec.	Time for Family	Fallback Career	Intrinsic Value	Social Influ-
							ences
partial	.005	.001	.004	.004	.004	.015	.013
p-value	.094	.500	.141	.122	.122	.003	.006

**Table 4.8 – (cont'd)** 

#### 4.4.3 Gender differences in motivational factors

Although the pattern of scoring remains consistent over gender, interestingly, male prospective teachers appear to have chosen teaching for intrinsic and social contribution reasons more than females. The following figure also shows that males scored relatively higher than females on ability. On the other hand females indicated choosing teaching for more personal utility factors such as time for family, job security; fallback career and social influences

MANOVA was conducted to determine the differences between males and females on their motivation scores. The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations: F(6,560)= 6.487; p= 0.000; Pillai's Trace=.065; partial eta squared= .065. When the results for the motivations were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were ability: F(1, 565)=11.883, p=.001, partial eta squared=.021; Time for family: F(1,565)=21.076, p=.000, partial eta squared=.036; and fallback career: F(1,565)=21.076, p=.000, partial eta squared=.036. Effect sizes for all significant motivations are small i.e. gender explains 2.1% variance in ability, 3.6% variance in fallback career, and 3.6% variance in time for family among new entrants.

Mean score for female new entrant on ability is M=4.1, SD=.78, whereas for men the score is M=4.4, SD=.76. For females mean score on fallback career is M=3.3, SD=1 which is slightly

higher than the mean score of males (M=2.8, SD=1). Mean score of females on time for family is M=3.3, SD=.05 which is again somewhat higher than that reported by males (M=2.8, SD=.08.

#### 4.4.4 Provincial differences in motivations

Overall the trend within provinces with regards to various motivational factors is similar to that in the overall sample, i.e. entrants score social utility, ability, and intrinsic factors higher than personal utility factors. However, when seen within provinces, differences in the motivations of males and females reveal some variation. In Punjab and Sindh motivational profiles of males and females showed no divergence from the overall motivational profiles by gender. In KPK there were slight differences: females reported slightly higher on ability (M=4.33, SD.49) than males (M=4.18, SD=1.1); and social contribution where females (M=4.59, SD=.32) scored higher than males (M=4.44, SD=.63).

MANOVA was conducted to determine the differences between males and females on the motivation scores within each of the three provinces. The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations only in the province of Sindh: F(6,222)=4.748; p= 0.000; Pillai's Trace=.99; partial eta squared= .99. When the results for the motivations were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were ability: F (1, 227)=9.031, p=.003, partial eta squared=.038; job security: F (1,227)=10.745, p=.003, partial eta squared=.039; and time for family: F(1,227)=17.96, p=.000, partial eta squared=.073. Effect size for ability and job security are small i.e. gender explains 3.8% variance in ability an 3.9% variance in job security. Effect sizes for time for family was medium where gender explains 7.3% variance in the variable.

Mean scores reveal that males score ability slightly higher (M=4.4, SD=.77) than females (M=4.03, SD=.78). Whereas, female new entrants score relatively higher (M=3.4, SD=1) than males (M=2.9, SD=1) on job security. Females also score higher (M=3.2, SD=.95) than males (M=2.6, SD=.98) on time for family.

#### **4.4.5 Program Type differences in motivation**

Across program types new entrants enrolled in ADE programs scored higher on all factors.

The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations: F(6,560)= 6.939; p= 0.000; Pillai's Trace=.069; partial eta squared= .069. When the results for the motivations were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were ability: F(1, 565)=7.014, p=.008, partial eta squared=.012; job security: F(1, 565)=17.108, p=.000, partial eta squared=.029; intrinsic: F(1, 565)=12.12, p=.001, partial eta squared=.021; and social influences: F(1, 565)=21.2, p=.000, partial eta squared=.036.

Effect sizes for all significant motivations are small i.e. enrollment in program type explains 1.2% variance in ability; 2.9% variance in job security; 2.1% variance in intrinsic, and 3.6% in social influences.

An inspection of mean scores revealed that new entrants in ADE programs score slightly higher than those enrolled in B. Ed (Hons) program on both motivations as also shown in Table 4.8.

#### 4.4.6 Parents' Occupation and motivational profile

Interestingly, those with teachers as parents scored higher on personal utility factors such as time for family, job security, as well as fallback career and social influences. This may be explained by the fact that students who have either or both parents as teachers are more aware of and influenced by the personal utility factors and may have been influenced by parents to join teaching for the same reasons.

However, the multivariate test of differences between the two groups using the Pillai's Trace criterion was not statistically significant for combined motivations: F(6, 559)= 2.673; p= 0.091; Pillai's Trace=.028; partial eta squared= .028.

#### 4.4.7 Qualification

The only motivation factor on which those with a science background differed significantly from non-science background prospective teachers was intrinsic value. Those with a science background have significantly different scores (M=3.7, SD=.96) from the non-science group [M=4.1, SD=.85; t(443)=4.094, p=.000] on perceptions about salary. The magnitude of the differences in the means is small (eta squared=.0365) for the two groups of prospective teachers. Overall, non-science group seem to be more intrinsically driven than the science group.

#### 4.4.8 Timing of decision

The figure below shows that deciding before finishing high school appears to be more adaptive, relating to higher mean scores on ability, and intrinsic. Those who decided after high school scored higher on job security, time for family, and fallback career. Those who decided before high school also seemed to be more socially influenced.

The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations: F(18,1665)=4.49; p=0.000; Pillai's Trace=.139; partial eta squared= .046. When the results for the motivations were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were intrinsic: F(3, 558)=14.882, p=.000, partial eta squared=.074; and fallback career: F(3, 558)=4.82, p=.003, partial eta squared=.025.

To follow-up, a one-way between-groups analysis of variance was conducted to explore the impact of decision time on fallback career and intrinsic. There was a statistically significant difference for intrinsic at the p<.05 level for those who decide before intermediate and those who decide after [F(3, 725)=20.29, p=.000], as well as those who decide at 'any other' time.

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for those who decide before intermediate (M=434, SD=.644) was significantly different those who decide after intermediate (M=3.9, SD=.87). Also, those who decide at 'any other' time score significantly less than the remaining groups (M=3.6, SD=1.1). The effect size, calculated was medium .077.

There was a statistically significant difference for falback career at the p<.05 level for those who decide before intermediate and those who decide after [F(3, 714)=4.4, p=.004]. Posthoc comparisons using the Tukey HSD test indicated that the mean score for those who decide before intermediate (M=2.9, SD=1) was significantly different those who decide after intermediate (M=3.3, SD=.99). Despite reaching statistical significance the difference between mean scores is nominal and the effect size is .018.

#### 4.4.9 First Career Choice

Overall, those who did not apply to another program prior to entering teacher education reported higher intrinsic motivation. Those who applied for admission to another program reported higher scores on time for family, and fallback career.

MANOVA was conducted to determine the differences in motivations between new entrants who sought admission into another program and those who did not. The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations: F(18, 1635)=2.76; p=0.000; Pillai's Trace=.088; partial eta squared= . 029. When the results for the motivations were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .007 was intrinsc value: F(3, 548)=9.95, p=.000, partial eta squared=.052. Those who did not apply for admission in another program scored higher (M=4.21, SD=.79) on intrinsic value than those who applied for admission (M=3.8, SD=.96) elsewhere before deciding to join teacher education.

#### 4.4.10 **Prior teaching experience**

Prior teaching experience seems to relate to higher scores on intrinsic and social influences. Whereas no prior teaching experience seems to be related to higher scores on personal utility factors such as job security, time for family, and fallback career.

The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined motivations: F(6, 557)= 2.94; p= 0.008; Pillai's

Trace=.031; partial eta squared= . 031. When the results for the motivations were considered separately, the only differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were intrinsic: F (1, 562)=8.68, p=.003, partial eta squared=.015; and social influences: F(1, 562)=7.665, p=.006, partial eta squared=.013. Teaching experience explain only a variance of 1.5% and 1.3% in both motivational factors, respectively.

Those who have teaching experience scored higher (M=4.21, SD=.9) on intrinsic than those who had no teaching experience (M=3.97, SD=.88). Similarly the experienced group scored higher (M=3.45, SD=1) on social influences than the inexperienced group (M=3.18, SD=1.06).

#### 4.4.11 Qualification

A one-way between-groups analysis of variance was conducted to explore the impact of qualification on intrinsic value. There was a statistically significant difference for intrinsic at the p<.05 level for those who have a science background in high school [F(8, 576)=5.15, p=.000], when compared with those with an arts background, or a teaching certificate (PTC/CT).

Post-hoc comparisons using the Tukey HSD test indicated that the mean score for science background was the lowest on intrinsic as compared to any other group (M=3.7, SD=.96).

#### 4.4.12 Motivations for teaching among advanced prospective teachers

Similar to the trend among new entrants, overall, among the advanced entrants highest rated motivations for choosing teaching included altruistic types of motivations such as shape make a social contribution (M=4.61, SD=0.83); followed by ability (M=4.35, SD=.99), and intrinsic career value (M=3.7, SD=.79).

The lowest rated motivations were choosing teaching as a "fallback" career (M=2.19, SD=1.29) and "time for family" (M=3.12, SD=1.16) followed by job security (M=3.16, SD=1.19) and social influences (M=3.19, SD=1.16).

#### **4.4.13** Motivational profile of advanced students by program type

An analysis by program type shows that ADE enrolled advanced students score visibly higher on intrinsic and make social contribution than their peers enrolled in B. Ed (Hons) programs. ADE students also scored relatively higher on personal utility factors such as job security. On the other hand B. Ed (Hons) students scored higher on fallback career.

As shown in table below, the multivariate test of differences between program types using the Pillai's Trace criterion was statistically significant for combined motivations: F(7, 115)= 3.016; p= 0.006; Pillai's Trace=.155; partial eta squared= .155. When the results for the motivations were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, were make social contribution: F(1, 121)=15.077, p=.000, partial eta squared=.111; fallback career: F(1, 121)=8.318, p=.005, partial eta squared=.064; and intrinsic: F(1, 121)=12.425, p=.001, partial eta squared=.093. All effect sizes were medium, with program type explaining 11.1% variance in making social contribution, 6.4% in fallback career, and 9.3% in intrinsic. An inspection of mean scores shows that those enrolled in ADE programs had a mean score of M=4.5 (SD=.42) on make social contribution higher than B. Ed (Hons) enrolled students (M=3.4, SD=.82). On fallback career ADE students had a mean score of M=1.98 (SD=1.14) as compared to B. Ed (Hons) students who had a mean score of 2.63 (SD=1.35).

Table 4.9: Descriptive statistics and inferential statistics for motivation among final year prospective teachers

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
	Gender						
Male	3.9(.77)	4.2(.41)	3.0(.92)	2.88(1)	2.4(1)	3.7(.7)	3(.88)
					С	ontinued on	next page

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
Female	4.1(.71)	4.4(.53)	3.2(1)	3.2(1)	2.3(1.32)	3.7(.78)	3.1(.97)
F(1,121)	1.135	1.270	.461	1.119	.152	.003	.051
partial	.009	.010	.004	.009	.001	.000	.000
p-value	.289	.262	.499	.292	.698	.957	.821
	Program						
	Туре						
ADE	4.13(.61)	4.5(.41)	3.21(1.16)	3.07(.95)	1.98(1.1)	3.9(.63)	3.16(.94)
В.	3.98(.81)	4.17(.55)	3.1(.9)	3.2(1.1)	2.63(1.4)	3.43(.82)	2.9(.96)
Ed(Hons)							
F(1,121)	1.188	15.077	.443	.197	8.318	12.425	1.945
partial	.010	.111	.004	.002	.064	.093	.016
p-value	.278	.000	.507	.658	.005	.001	.166

Table 4.9 – (cont'd)

# 4.5 Perceptions About Teaching

## 4.5.1 Perceptions about teaching among new entrants

Overall, prospective teachers in the study sample perceived teaching as a career which is high in demand, and low in return. Figure below summarizes the mean scores for each perception for all new entrants.

At the same time, participants generally showed moderate levels of satisfaction with their choice of teaching and did not report strong dissuasion by others to join teaching.

## 4.5.2 Perceptions about teaching by across various subgroups

The Table below shows all descriptive and inferential statistics for perceptions about teaching among new entrants.

Table 4.10: Descriptive statistics and inferential statistics for perceptions among first year prospective teachers

Perceptions	Task Demand	Social Status	Salary	Social	Satisfaction	
				Dissuasion	with Choice	
	Gender					
Male	4.45(.50)	4.1(.79)	3.38(.9)	2.38 (.91)	3.75(1.38)	
Female	4.42(.65)	4.1(.77)	3.49(.98)	2.38(1)	3.46(1.3)	
F(1,703)	.314	.077	1.612	.002	6.141	
partial	.000	.000	.002	.000	.009	
p-value	.576	.782	.205	.964	.013	
	Program type					
ADE	4.48(.53)	4.09(.74)	3.49(.97)	2.36(1)	3.7(1.3)	
B.Ed (Hons)	4.4(1.6)	3.95(.88)	3.37(.93)	2.5(.98)	2.87(1.2)	
F(1,704)	20.268	3.890	1.613	1.263	49.00	
partial	.028	.005	.002	.002	.065	
p-value	.000	.049	.205	.261	.000	
	Province					
Continued on next page						

Perceptions	Task Demand	Social Status	Salary	Social	Satisfaction	
				Dissuasion	with Choice	
Punjab	4.54 (.46)	4.1(.75)	3.57(.96)	2.48(1.1)	3.9(1)	
Sindh	4.3 (.78)	4.1(.83)	3.27(.94)	2.14(.77)	2.85(1.5)	
КРК	4.56(.5)	4.22(.62)	3.6(.91)	2.95(1.19)	4.3(.63)	
F(2,703)	18.185	.908	8.579	16.687	70.38	
partial	.049	.003	.024	.045	.167	
p-value	.000	.404	.000	.000	.000	
	Parents					
Parents are	4.42(.57)	4(.84)	3.5(.84)	2.5(1.07)	3.7(1.25)	
teachers						
Parents are not	.43(.64)	4.1(.76)	3.5(.99)	2.4(.99)	3.5(1.34)	
teachers 4						
F(1,703)	.037	.628	.314	1.1	4.143	
Partial	.000	.001	.000	.002	.006	
p-value	.848	.428	.575	.295	.042	
	Decision time					
Before FA/FSc	4.38(.60)	4.08(.77)	3.37(1)	2.33 (.99)	3.54(1.5)	
After FA/FS	4.47(.56)	4.1(.73)	3.53(.93)	2.4(1)	3.59(1.22)	
During	4.51(.55)	4.1(.74)	3.32(1.2)	2.4(1)	4.3(.84)	
BA/BSc						
Any other	4.32(.88)	3.9(.95)	3.4(.90)	2.36(.91)	2.97(1.38)	
F(3,695)	1.98	2.166	1.483	.231	10.241	
	Continued on next page					

Table 4.10 – (cont'd)
Perceptions	Task Demand	Social Status	Salary	Social	Satisfaction
				Dissuasion	with Choice
partial	.008	.009	.006	.001	.042
p-value	.116	.091	.218	.875	.000
	First career				
	choice				
Yes	4.47(.57)	3.96(.82)	3.4(.94)	2.6(1)	3.34(1.25)
No	4.4(.64)	4.14(.73)	3.5(.97)	2.2(.93)	3.63(1.36)
F(3,685)	1.467	3.538	1.023	8.170	2.869
partial	.006	.015	.004	.035	.012
p-value	.222	.014	.382	.000	.036
	Teaching				
	experience				
Yes	4.38 (.71)	4.1(.81)	3.44(.89)	2.4(.96)	3.3(1.4)
No	4.5(.55)	4.1(.75)	3.48(.99)	2.4(1)	3.6(1.2)
F(1,699)	1.985	.014	.266	.270	8.801
partial	.003	.000	.000	.000	.012
p-value	.159	.907	.606	.604	.003

Table 4.10 – (cont'd)

As the table above shows there were no multivariate effects of gender, parental occupation, and prior teaching experience on the perceptions of new entrants. However, some subgroup differences existed as described below.

#### 4.5.3 By program

The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined perceptions: F(5, 700)= 12.438; p= 0.000; Pillai's Trace=.082; partial eta squared= .082. When the results for the perceptions were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .01, were task demand: F(1,704)=20.268, p=.000, partial eta squared=.028; and satisfaction with choice: F(1, 704)=49.006, p=.000, partial eta squared=.065. Effect size for both variables was medium.

An inspection of mean scores on difficulty reveal that those enrolled in ADE program (M=4.48, SD=.53) rated teaching more demanding than those enrolled in B. Ed (Hons) programs (M=4.22, SD=.86). Those enrolled in ADE program showed more satisfaction with their choice of teaching (M=3.7, SD=1.3) as compared to those enrolled in B. Ed (Hons) program (M=2.87, SD=1.19).

#### 4.5.4 Provincial differences in perceptions

The multivariate test of differences between Punjab, Sindh, and KPK using the Pillai's Trace criterion was statistically significant for combined perceptions: F(10, 1400)= 18.029; p=0.000; Pillai's Trace=.228; partial eta squared= .114. When the results for the perceptions were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .01, were task demand: F(2, 703)=18.185, p=.000, partial eta squared=.049; salary: F (2, 703)=.908, p=.000, partial eta squared=.024; social dissuasion: F(2, 703)=16.687, p=.000, partial eta squared=.045; and satisfaction with choice: F(2, 703)=70.383, p=.000, partial eta squared=.167. The effect sizes for the first three variables were small, however the effect size for satisfaction with choice was large, which means that belonging to a province determines 16.7% variance in satisfaction with choice.

To follow-up, one-way between-groups analysis of variance were conducted to explore the impact of province on task demand, salary, social dissuasion, and satisfaction with choice.

For task demand, there was a statistically significant difference at the p < .05 level for the three

provinces [F(2, 743)=19.216, p=.000]. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Punjab (4.5, SD=.46) was significantly different from Sindh (M=4.25, SD=.82). Sindh was also significantly different from KPK (M=4.6, SD=.51).

Despite reaching statistical significance, the actual difference in mean scores between the groups was small. The effect size, calculated using eta squared, was .049.

For social dissuasion, there was a statistically significant difference at the p < .05 level for the three provinces [F(2, 739)=19.951, p=.000]. Post-hoc comparisons using the Tukey HSD test indicated that the mean scores for all provinces significantly different from each other.

Despite reaching statistical significance, the actual difference in mean scores between the groups was small. The effect size, calculated using eta squared, was .051.

For satisfaction with choice, there was a statistically significant difference at the p < .05 level for the three provinces [F(2, 744)=77.362, p=.000]. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Sindh (2.82, SD=1.5) was significantly different from both Punjab (M=3.9, SD=1) and KPK (M=4.3, SD=.7), indicating that prospective teachers are least satisfied with their career choice in Sindh.

The effect size, calculated using eta squared, was large .172.

# 4.5.5 By Qualification (Science versus non-science group)

Multiple independent-samples t-tests were conducted. The only significant difference was observed in scores for science group (M=2.77, SD=1) and non-science group [M=2.4, SD=1; t(447)=-3.536, p=.000] on social dissuasion. The magnitude of the differences in the means is small (eta squared=.027) for the two groups of prospective teachers. Science prospective teachers seem to have experienced more social dissuasion than the non-science prospective teachers.

### 4.5.6 By career choice

The multivariate test of differences between those who applied to teaching as a first choice versus those who applied to other programs before coming to teaching using the Pillai's Trace criterion

was statistically significant for combined perceptions: F(15, 2049)= 3.567; p= 0.000; Pillai's Trace=.076; partial eta squared= .025. When the results for the perceptions were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .01, was social dissuasion: F(3,685)=8.17, p=.000, partial eta squared=.035. Apparently, those who decided to pursue teaching after applying elsewhere were more strongly dissuaded by others from joining teaching than those who only applied to teaching. Although the effect size was small, explaining only 3.5

# 4.5.7 Decision timing

The multivariate test of differences for decision timings using the Pillai's Trace criterion was statistically significant for combined perceptions: F(15, 2079)= 2.874; p= 0.000; Pillai's Trace=.061; partial eta squared= .020. When the results for the perceptions were considered separately, the only difference to reach statistical significance, using a Bonferroni adjusted alpha level of .01, was satisfaction with choice: F(3,695)=10.241, p=.000, partial eta squared=.042. Although the effect size was small, explaining only 4.2% variance in satisfaction with choice.

To follow-up, one-way between-groups analysis of variance were conducted to explore the impact of decision time on satisfaction with choice.

There was a statistically significant difference at the p<.05 level for decision time [F(3, 735)=10.654, p=.000]. Post-hoc comparisons using the Tukey HSD test indicated that the mean score on satisfaction for those who decided during BA/BSc (4.27, SD=1.53) and others (M=2.97, SD=1.36) was significantly different from those who decided before (M=3.48, SD=1.53) and after FA/FSc (M=3.58, SD=1.23).

Despite reaching statistical significance, the actual difference in mean scores between the groups was small. The effect size, calculated using eta squared, was .0416.

Perceptions about teaching among the advanced cohort: When asked about their perceptions about teaching as a profession again the trends among advanced cohort were similar to those seen among the new entrants, i.e. advanced prospective teachers see teaching as a highly specialized (M=4.15, SD=1.25) and demanding profession (M=3.95, SD=1.23) which is not considered very high status (M=3.69, SD=1.12) and pays low salary (M=3.14, SD=1.04).

### 4.5.8 Influence of gender on perceptions

With regards to perceptions, females when compared to males consider teaching as a lower demand profession which incurs high social status and salary. Males on the other hand, consider teaching more specialized, more demanding but less in status and salary.

Multiple independent-samples t-tests were conducted. The only significant difference was observed in scores for males (M=2.7, SD=.97) and females [M=3.2, SD=1.03; t(173)=-2.309, p=.000] on perceptions about salary. The magnitude of the differences in the means is moderate (eta squared=.065) for the two groups of prospective teachers. Females seem to be more satisfied with salary than male prospective teachers.

#### **4.5.9 Program type influences on perceptions**

Overall, those enrolled in B. Ed (Hons) a higher demand career as compared to ADE enrolled students. Those enrolled in B. Ed (Hons) also consider teaching higher in status.

The multivariate test of differences between program types using the Pillai's Trace criterion was statistically significant for combined perceptions: F(5, 154)=5.507; p=0.000; Pillai's Trace=.152; partial eta squared= .152. When the results for the perceptions were considered separately, the differences to reach statistical significance, using a Bonferroni adjusted alpha level of .01, were task demand: F(1, 158)=13.487, p=.000, partial eta squared=.079; and social dissuasion: F(1, 158)=12.61, p=.001, partial eta squared=.074. All effect sizes were medium, with program type explaining 7.9% variance in task demand and 7.4% variance in social dissuasion. An inspection of mean scores shows that those enrolled in ADE programs had a mean score of M=3.78 (SD=1.38) on task demand as compared to B. Ed (Hons) enrolled students (M=4.45, SD=.6). On social dissuasion ADE students scored (M=1.98, SD=.81) than B. Ed (Hons) (M=2.5, SD=1.03).

## 4.5.10 Perception by science or non-science qualification

Multiple independent-samples t-tests were conducted. The only significant difference was observed in scores for science group (M=3.1, SD=.99) and non-science group [M=2.4, SD=1.19; t(77)=-2.477, p=.015] on social dissuasion. The magnitude of the differences in the means is moderate (eta squared=.074) for the two groups of prospective teachers. Science prospective teachers seem to have experienced more social dissuasion than the non-science prospective teachers.

Table 4.11: Descriptive statistics and inferential statistics for perceptions among final year prospective teachers.

Perceptions	Task Demand	Social Status	Salary	Social	Satisfaction
				Dissuasion	with Choice
	Program type				
ADE	3.8(1.38)	3.56(1.26)	3.14(1.0	7)1.98(.82)	2.5(1.4)
B.Ed (Hons)	4.45(.6)	3.9(.80)	3.14(1)	2.5(1.03)	2.8(1.25)
F(1,158)	13.487	2.899	.006	12.61	.955
partial	.079	.018	.000	.074	.006
p-value	.000	.091	.941	.001	.330

# 4.6 Comparison of Entry Level and Advanced Pre-service Teachers' Motivations and Perceptions

MANOVA was conducted to determine the differences between the two groups on the motivation scores, and their perceptions about the teaching profession. The multivariate test of differences between the two groups using the Pillai's Trace criterion was statistically significant for combined

motivations: F(7,682)= 31.99; p= 0.000; Pillai's Trace=.247; partial eta squared= .247. When the results for the motivations were considered separately, the only two differences to reach statistical significance, using a Bonferroni adjusted alpha level of .007, was fallback career: F (1, 688)=64.873, p=.000, partial eta squared=.086; and intrinsic value: F (1, 688)=18.642, p=.000, partial eta squared=.026. An inspection of effect sizes revealed that only fallback career has a medium effect size of 0.086, i.e. 8.6% variance in fallback career is explained by which stage a prospective teacher is at in their programs.

An inspection of the mean scores indicated that entry level prospective teachers identified fallback career as a stronger motivation to choose teaching (M=3.15,SD=1.03) than advanced prospective teachers (M=2.29,SD=1.29). They also displayed more intrinsic motivation (M=4.05, SD=.88) than advanced (M=3.68, SD=.76) prospective teachers.

Motivations	Ability	Social	Job Sec.	Time for	Fallback	Intrinsic	Social
		Contrib.		Family	Career	Value	Influ-
							ences
	Stage						
Entry Level	4.16(.79)	4.5(.5)	3.36(1)	3.2(1)	3.2(1)	4.1(.88)	3.3(1)
Advanced	4.06(.72)	4.4(.51)	3.2(1)	3.1(1)	2.3(1.28)	3.67(.76)	3.1(.95)
F(1,688)	1.817	9.557	3.6	.157	64.873	18.642	4.636
partial	.003	.014	.005	.000	.086	.026	.007
p-value	.178	.002	.058	.692	.000	.000	.032

Table 4.12: Descriptive statistics and inferential statistics for motivations among entry level and advanced prospective teachers.

The multivariate test of differences between the two groups using the Pillai's Trace criterion

was also statistically significant for combined perceptions: F(5,860)= 16.068; p= 0.000; Pillai's Trace=.085; partial eta squared= .085. When the results for the perceptions were considered separately, all perceptions except social dissuasion reached statistical significance, using a Bonferroni adjusted alpha level of .01.

Task demand: F(1, 864)=31.075, p=.000, partial eta squared=.035; social status: F(1, 864)=25.527, p=.000, partial eta squared=.029; salary: F(1,864)=13.696, p=.000, partial eta squared=.016; and satisfaction with choice: F(1, 864)=59.673, p=.000, partial eta squared=.065. An inspection of effect sizes revealed that all of the perceptions except satisfaction have a small effect size where stage of prospective teachers explains a variance of 3.5% in task demand; 2.9% in social status; 1.6% in salary; and 6.5% variance in satisfaction with choice.

An inspection of the mean scores in the table below reveals that the mean scores of entry level prospective teachers are slightly higher than that of advanced prospective teachers on all 4 perceptions about teaching (shown in Table 4.13) where entry level prospective teachers are consider teaching to be a more demanding job, higher in salary and social status, and are more satisfied with their choice of teaching than advanced level prospective teachers.

#### 4.6.1 Relationships among subscales

Some interesting and significant relationships between the motivation factors and perceptions about teaching were observed. In the entry level cohort the relationship between intrinsic values and satisfaction with choice was the highest (r= .409, see Table ), and ability, social status, salary, and social influence all positively related to satisfaction with choice. These correlations provide information on the importance of those motivational factors for satisfaction with choice.

Another strong relationship was observed between salary and fallback career (r=.303). Task demand and social status were strongly related (r=.371) as well as salary and social status (r=.317).

Among the advanced cohort the strongest correlation of satisfaction with choice was observed with salary (r=.395) and task demand (r=.347). Task demand was very strongly related to social status (r=.675), and strongly negatively correlated with ability (r=-.602). Ability was also

strongly and natively correlated with social status (r=-.468). Make social contribution had similar relationship with task demand (r=-.598) and social status (r=-.481). Fallback was also related strongly with social dissuasion (r=.305). Intrinsic value and social dissuasion were also strongly negatively related (r=-.408).

# 4.7 **Open Ended Responses**

A simple analysis of responses to the one open ended question "What is your primary reason for becoming a teacher¿ was carried out to; (1) identify recurrent themes for choosing teaching; (2) identify any themes which may be turned into items to further adapt the FIT-Choice scale for the Pakistani context of teaching. Following themes emerged:

## 4.7.1 Intrinsic reasons

This emerged as the most recurrent motivation or reason prospective teachers identified as their primary reason for becoming a teacher. This is consistent with the survey findings also, where intrinsic values was one of the higher rated motivations. Responses that fell within this theme included statements like 'it's my childhood dream', 'I have always wanted to be a teacher', 'it is a fulfilling profession', 'it's my desire', 'I am fond of teaching', 'I love teaching'. The reason cited most often for liking this profession was 'to be able to work with children'(this may be a reason that in my examination of the factor structure underlying the FIT-Choice scale intrinsic reasons combined with want to work with children) 'because of religious reasons' and the perception that 'teaching is a noble and respectable profession, especially for women.'

# 4.7.2 To make a social contribution

This also emerged as a recurrent theme. Responses included: 'to serve my nation and to better the future of children', 'to guide children', 'to work for the betterment of humanity', 'create a change in children and help them become good human beings', 'to teach in my village because we don't

have any good teachers', 'so that poor children can also have a chance at life', 'to develop good citizens', to change the conditions of my country', 'to serve my nation', 'to help develop the next generation of this country', 'I want to teach poor children.'

## 4.7.3 Social Influence

Responses within this theme were also consistent with the items of FIT-Choice scale pertaining to this factor. Response statements included: 'my family wanted me to', 'my uncle got me admitted', my brother and father got me admitted', 'my father likes teaching', 'I did not want to become a teacher but my parents and friends told me that I can be a good teacher. I came here because of them', 'My teachers advised me to. Otherwise I would not have come here.'

In some cases prospective teachers followed up by saying that they were also happy with this choice including; 'My family considers this a good profession. I also like teaching', 'It is a good profession for women and my parents' wish', 'My father likes this profession for girls. It is my own interest too.'

In other cases they saw this influence as negative because it was against their wishes; 'I did not want to become a teacher. My father got me admitted to this college so I came here', 'I never thought about this field. I came here on the insistence of my parents. I don't know if I will be able to carry this on or not.' Prior teaching and learning experiences: Interestingly responses given under this theme identified both positive and negative prior experiences as reasons for wanting to become a teacher. Sample statements include; 'My teachers were very good and they inspired me to become a teacher', 'Inspired by my teachers. Also, during my earlier teaching experience parents appreciated how I taught their children', 'I want to improve the system of education in our country', 'I want to change the traditional ways of teaching and learning.'

Examples of negative prior experiences as influential factors include; 'When I used to see others teach I wanted to teach too. I have seen strict teachers who are strict with kids. I want to teach children in an affectionate manner', 'The schools I studied in did not have good teachers so I decided to become a better teacher myself,' 'I have studied in a government school and college. I want to introduce the same ways of teaching in government schools as are prevalent in private schools', 'want to end the traditional ways of teaching.'

# 4.7.4 Job security/ Economic independence

Economic independence, need for an easy to get and stable job, poor economic conditions of the household were all reasons cited within this theme. Some statements include: 'To do a job and earn money. I just want to take it as a part time job or may be an additional source of income', 'I want to be a teacher to support my siblings. Otherwise I don't have an interest in it. I am doing it only for my family so that I can fulfill my responsibilities being the eldest in my family', 'To support my family', 'My father is a laborer and his health is deteriorating. So I want to get something soon and help him', 'My domestic conditions are not good. I want to help my parents after I become a teacher', 'We are three sisters. My mother has separated from my father. I am the eldest so I need a government job. My mother thought that teaching is a good job so I came here', 'to earn a good income and for my good future', 'To get a job and find a place for myself in the society', 'I don't want to be dependent on others', 'I want to be a teacher to get a job. These days a lot of source (reference) is needed. I hope to get a job right away', 'for a government job', 'my family is not very prosperous and can't buy things we want. So, I want to earn.'

# 4.7.5 Time for family

This did not emerge as one of the most cited themes perhaps because of the age and single status of prospective teachers in my sample. However, some females did respond to the question by saying that it is a desirable profession because it allows women time at home. A few responses included; 'It provides security especially to women. It allows them to spend more time at home. They can raise children', 'It is a respectable profession for women. Gets them a good salary. You can give your family time and look after your kids', 'It is the best profession for women especially married women because they can be home on time.'

#### 4.7.6 Fallback career

This was a recurrent theme. Most often cited reason within this theme was that inability to get into a program of choice led prospective teachers to teaching. In some cases prospective teachers joined teacher education as a fallback option but have now become interested; in other cases prospective teachers have compromised with their situation but are not necessarily satisfied or interested. Sample statements include:

'I did not want to be a teacher. I wanted to be a doctor. Could not get into medical and my parents asked me to join here', 'Wanted to become a doctor but couldn't so came here', 'I did not want to become a teacher, but could not get into medical', 'Did not get into engineering and mother asked to be a teacher', 'I did not want to come here but could not get into the institution of my choice', 'Could not get into the university', 'I did not get into medical so though should do ADE so that I am not bored of life', 'I wanted to get into IT but couldn't. My uncle advised me to join B. Ed. I find it interesting now', 'I was not interested in teaching. I was interested in psychology', 'I couldn't get into a Biology related field so came here', 'Never thought about it practically. Tried getting into a science subject. When I did not get admission I came here.'

# 4.7.7 Continue education

Although this was not a major theme, some respondents see teaching as a way of continuing their education. They either want to stay in teaching and learn in it or see teacher education or teaching only as a first step towards other professions they really want to pursue. Respondents said; 'My knowledge and experience will increase', 'I want to be a professor so doing this only as a course. After this I will do MPhil or PhD', 'Ultimately I want to become a researcher', 'I like to learn, I want to continue learning.'

## 4.7.8 Ability

A small number of prospective teachers seem to believe that they have what it takes to be a good teacher. They said 'wanted to be a teacher and have attributes needed', 'Not everyone can be a teacher. It requires certain attributes. I think I can be a good teacher', 'I have the ability to teach.'

Continuation of family profession: Several respondents shared that their parents or other family members are teachers and they would like to continue with the family profession. This is an unexplored theme in the FIT-Choice scale. Items related to this theme may be included in the modified FIT-Choice scale for Pakistan and pilot tested to examine their appropriateness. Sample statements included: 'My father is a teacher so I like this profession', 'I am inspired by my mother because she is also a teacher', family has a number of teachers,' 'It is my family occupation,' 'Inspired by my three uncles who are teachers', 'My sister is a teacher and she inspired me', 'My sisters and father are teachers. That is why I am also becoming a teacher.'

Some reasons were not necessarily motivations but facilitators that either eased entry of certain subgroups of prospective teachers into teacher education or made teaching their only choice. These included:

# 4.7.9 Gender roles/cultural expectations

It is apparent from several responses that teaching is still to a large extent one of the few options available to women who want to pursue a career. Parents especially fathers are unwilling to send their daughters to institutions or workplaces where sexes mingle. They consider teaching to be the safest option for the women in their family. Statements included: 'Teaching is a perfect job for women. It allows them to fulfill their duties at home and school', 'Because teaching is a secure profession for girls. My family does not allow any other profession. If I was given a different opportunity I would not have come to teaching', 'Because in our society girls are not allowed all kinds of jobs. This is a noble and secure profession', 'My father wanted me to be a teacher because this is considered a good profession for girls', 'My family does not allow girls to work. This was the only profession my parents were willing to let me have', 'In our family girls are not allowed to

do anything else but teaching', 'My parents were satisfied because there are no boys here', 'It is a good profession for women. Women keep safe in this profession', 'I wanted to become a lawyer but it is not a good profession in Pakistan for women so had to come here.

# **4.7.10** Perceptions about the status of teaching

Perceptions about the social status of teaching emerged as a strong reason for coming to teacher education. A number of prospective teachers, especially females, shared; 'because of the status of teaching', 'teaching is a respectable profession for women', teaching enjoys a good status in our society', 'it is a noble and sacred profession', 'everyone looks at teachers with respect.'

# 4.7.11 Case of the still undecided

I did not want to become a teacher. Suddenly this opportunity arose and I came here. I never wanted to don't know how and why I came to this college. did not plan before coming here. Just came because I studied Education in FA.

Table 4.13: Descriptive statistics and inferential statistics for perceptions among entry level and advanced prospective teachers

Stage					
Entry Level	4.43(.62)	4.1(.78)	3.46(.96)	2.38(1)	3.5(1.32)
Advanced	4.1(1.17)	3.7(1.1)	3.14(1)	2.2(.94)	2.6(1.36)
F(1,864)	31.075	25.527	13.696	4.377	59.673
partial	.035	.029	.016	.005	.065
p-value	.000	.000	.000	.037	.000

	Task	Social	Salary	Social	Satisfaction
	Demand	Status		Dissuasion	with Choice
Ability	602**	468**	137	106	127
Make Social	598**	481**	145	276**	209**
Contribution					
Job Security	004	.072	.281**	008	.178*
Time for Family	.028	.082	.190*	.110	.167*
Fallback Career	.052	.110	.123	.305**	.043
Intrinsic	.282**	.297**	.097	408**	.034
Social	238**	165*	.203**	168*	005
Influences					
Task Demand	1	.675**	.254**	.054	.347**
Social Status		1	.375**	088	.178*
Salary			1	.027	.395**
Social				1	.194*
Dissuasion					
Satisfaction					1
with Choice					

Table 4.14: Subscale correlation (Advanced cohort).

 Table 4.15: Subscale correlation (Entry level cohort).

Perceptions	Task	Social	Salary	Social	Satisfaction
	Demand	Status		Dissuasion	with Choice
Ability	.110**	.138**	.175**	039	.275**
Make Social	.295**	.275**	.134**	108**	.179**
Contribution					
Job Security	.112	.136**	.295**	.003	.115**
Time for Family	.019	.046	.303**	.118**	.064
Fallback Career	.019	.046	.303**	.118**	.064
Intrinsic Career	.181**	.291**	.161**	144**	.409**
Value					
Social	.135**	.230**	.242**	044	.258**
Influences					
Task Demand	1	.371**	.203**	034	.139**
Social Status		1	.317**	109**	.231**
Salary			1	008	.226**
Social				1	.137**
Dissuasion					
Satisfaction					1
with Choice					

Chapter 5

# DISCUSSION

The threefold overarching aims in this study were; first, to examine the performance of the FIT-Choice scale among a large sample of beginning pre-service teachers encompassing the two new teacher education programs, namely ADE and B.Ed (Hons); second, to establish who chooses to become an elementary teacher through the two new teacher education routes; and third to interpret influential motivations and perceptions in the Pakistani context, particularly for new entering preservice teachers in comparison to more advanced prospective teachers.

Responding to these main goals of the study, in this chapter, I first discuss usability of the FIT-Choice scale in the Pakistani context. Second, I discuss the characteristics of entrants the new teacher education programs are attracting. Knowing where prospective teachers in the new programs are coming from will help understand their motivations for choosing teaching and their perceptions about teaching. After that I provide a snapshot of main findings from the study about the trends in motivations and perceptions about teaching. I then deep dive into motivations and perceptions interpreting findings from the earlier chapter, contextualizing them, and comparing and contrasting with existing studies.

Before drawing conclusions, I make some recommendations for policy and practice based on discussion of findings from this study and provide possible directions for future research.

# 5.1 The Pakistani FIT-Choice Scale

The structure of the original FIT-Choice scale, as observed in this study, with some modifications was more or less consistent with the structure as presented and confirmed by FIT-Choice studies in other contexts Kilinc, Watt, & Richardson, 2012 [Kılınç et al., 2012]; Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012] ; Eren & Tezel, 2010 [Eren and Tezel, 2010]; Richardson & Watt, 2006 [Richardson and Watt, 2006].

For the motivation constructs, generally there were two differences. The first difference concerned the combining of items from the original factors prior teaching and learning experiences, intrinsic career value, work with children/adolescents which I named Intrinsic Value. Unlike the Australian Richardson & Watt, 2006 [Richardson and Watt, 2006] and Turkish students Kilin,

Watts, & Richardson, 2012 [Kılınç et al., 2012] Pakistani students do not seem to differentiate between prior teaching and learning experiences, intrinsic career value, and wanting to work with children/adolescents. This makes sense if one refers to their open ended responses. As discussed in the findings chapter, pre-service teachers who responded with more intrinsic reasons followed up by stating the reason for that intrinsic desire such as 'like teaching because of my teachers' or 'have always wanted to be a teacher because I love children.'

The second difference related to the second factor, which consisted of the items of the original factors job security, and time for family, which I named Personal Utility Value after the higher order factor from the Richardson & Watt, 2007 [Richardson and Watt, 2006] study.

The third difference related to the third factor, which consisted of items from the original make social contribution, Shape future of children/adolescents, enhance social equity, and the original factor ability. I named this factor Social Utility Values after the higher order factor from the Richardson & Watt, 2007 [Richardson and Watt, 2006] study. Although further research and validation of findings from this study should be performed, it might be that Australian preservice teachers consider the motivations shape future of children/adolescents, enhance social equity, and make a social contribution as truly separate motivations, while they are highly similar for Pakistani preservice teachers, resulting in a single factor. In this regard, the structure of the Pakistani FIT-Choice scale is similar to what Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012] found in the Dutch teacher education context

With regards to perceptions about teaching constructs there were not many differences compared to the original Watt & Richardson, 2007 [Watt and Richardson, 2007] structure, except the combining of items from both task difficulty and task expertise, which belong to their higher order factor task demand. In the Pakistani context it may be that pre-service teachers consider that tasks demanding specialized knowledge and skill are also difficult in nature and vice versa. Again this result coincides with the findings from the Dutch pre-service study Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012].

Subscale reliabilities across entry level and advanced pre-service teachers were also acceptable,

with the borderline exception of the two factors: fallback career and job security.

Translation of scale may be one explanation. A second explanation may be that prospective teachers consider referring to teaching, a profession they have chosen to pursue, as 'security seekers' somewhat deriding resulting in inconsistent responses to related items. Findings concerning these factors should be therefore interpreted with some caution.

Other than these differences, the FIT-Choice scale developed from the expectancy-value theory Eccles et al., 1983 [Eccles, 1983] is a theoretically sound framework for studying choice of teaching as a career across contexts, including that of Pakistan as shown through this study. It integrates well aspects of motivation that have been suggested by previous studies in teacher education as well as the career choice literature as well focuses on the less studied aspects of motivation in teacher education such as beliefs related to ability and intrinsic value Watt & Richardson, 2007 [Watt and Richardson, 2007] may drive people to choose teaching as a career. The social utility higher order factor resembles altruism as described in earlier research Book & Freeman, 1985 [Book et al., 1985]; Brown, 1992 [Brown, 1992] and mentioned in the literature review section of this study. It has been identified as the most influential factor in choosing teaching. Personal utility factors, such as secured employment, time for family have also been linked to decision for choosing teaching by various researchers under different names such as auxiliary rewards Lortie, 2002 [Lortie, 2002] and quality of life issues Jantzen, 1981 [Jantzen, 1981]; Richardson & Watt, 2005 [Richardson and Watt, 2005]. Identifying with teachers and prior teaching and learning experiences have also been liked positively with decision to teach by prior studies Lortie, 2002 [Lortie, 2002]. Open ended responses do indicate presence of other motivations as well as suggest refining existing categories for motivation even further. Future researchers may want to take into account especially in the Pakistani context. For instance, open ended responses suggest that 'continuing education', 'continuation of family profession', 'gender roles/cultural expectations', 'case of the still undecided' and 'perceptions about the status of teaching' are some categories that may benefit future studies of motivations in teaching and teacher education.

The large sample size and high response rates from several different institutions across different provincial contexts implies that the findings from this study are representative of prospective teachers enrolled in the new programs at colleges and universities in Punjab and Sindh.

# 5.2 **Profile of Prospective Teachers**

Majority of the new entrants are young (median age of 19 for females and 20 for males), and females (N=580) with much lower representation of males (N=179). The most obvious explanation for the young age of entrants is that the new programs are designed to admit those directly graduating from higher secondary school (high school). Despite this, a sizeable (almost 18%) number of students with prior post high school qualifications have also opted for the new Programs. The fact that most new entrants are females is not surprising at all considering that teaching at the elementary level is regarded as a 'feminine' profession in many countries around the world Kilin, Watt, & Richardson, 2012 [Kılınç et al., 2012]; Lortie, 2002 [Lortie, 2002]. The kind of attributes expected of elementary school teachers (nurturing and ability to work with young children) are generally attributed to women in the Pakistani society. Also the reward structure, job security and short hours make it a more attractive profession for females as compared to males Lortie, 2002 [Lortie, 2002].

However, this skewness may also be because of the fact that one college in Sindh, one college and two universities in Punjab were single sex all female institutions. Over representation of females in elementary teaching, however, is not a particularly problematic finding as it is in some of the more developed countries like Canada where researchers are suggesting that lack of male role models in elementary teaching can be detrimental to the development of boys Martino, 2008 [Martino, 2008].

The socio-economic backgrounds of prospective teachers is influenced by their family background, i.e. the educational attainment and occupation of their parents. With regards to the educational attainment and occupational status of parents, prospective teachers do not originate from highly educated and highly professional families. However, a comparative examination of qualifications of parents with the distribution of males and females in different levels of education across Pakistan (Pakistan Labor Survey, 2009-2010) reveals that large proportions of prospective teachers come from families where parents especially fathers are relatively better educated. For example according to the labor survey (2009-10) about 58% of males and 37.5% females in Pakistan have less than 12 years of formal education. Whereas in my sample, 28% fathers and 34% mothers have received less than 12 years of education. Similarly, according to the labor survey, only 5.6% males and 3.8% females have 12 years of education whereas in the study sample 25% mothers and 17% fathers have received 12 years of education. 5.3% males and 3.4% females in the larger population have a degree or above. In the study sample, approximately 46% fathers and 18% have a degree or above. With regards to occupations, majority of prospective students come from households where only the father works to earn livelihood. Only 13% mothers work. The largest proportion (10%) of working mothers are teachers. The relatively less diverse occupational affiliation of mothers is explained by the socio-cultural setting of the society where females are more likely to engage in a restricted set of outdoor activities, teaching being a popular one among those activities.

On the contrary, as also showed in the findings section, fathers of prospective teachers belong to a wide range of occupations which reflects the overall structure of labor force in Pakistan. Most of the fathers are working in the modern sector of regular wage employment. The largest proportions of those who are in the modern sector fall in the occupational groups (as defined by the Pakistan Labor force survey) of technicians and associate professionals; clerks; service workers/shop and market sales workers; skilled agricultural and fishery workers; Craft and related trade workers; professionals, and those in unskilled occupations. Also disproportionate numbers appear to have parents who are teachers.

Average monthly income for these occupational groups ranges from Rs. 6,118 (USD 62) for unskilled labor to Rs. 17,510 per month (USD 175) for professionals.

In short, prospective teachers come from families that; have modest educational attainment although in proportions above that are seen in the larger population; have parents, mostly fathers working in professional and mostly semi-professional occupations with an income low in absolute terms but ranging from the same as the per capita income to almost twice as much. It is reasonable to conclude from the above that majority of prospective teachers come from white collar families, though a minority comes from backgrounds where parents are not educated and belong to blue collar occupations.

The fact that prospective teachers come from socio-economic backgrounds higher than that of the average population has two possible implications. First, is the issue of 'social distance' Rawal & Kingdon, 2010 [Rawal and Kingdon, 2010], i.e. the differential in the social, economic, and cultural background of prospective teachers and the home backgrounds of students they are likely to teach in the future. Greater Social distance not only has a negative impact on the learning of students Rawal & Kingdon [Rawal and Kingdon, 2010] but it is also widely known that teachers who come from better socio-economic standing fail to relate to children from poor families and are often unwilling to serve in rural areas Hedges, 2000 [Hedges, 2000]. Another consequence of the home background characteristics may be that prospective teachers who come from white collar class have different aspirations for themselves. From the discussion in chapter 2 it is clear that in Pakistan teaching is a white collar occupation. Where it may provide a chance of upward mobility to students coming from blue collar backgrounds, it has little attractiveness in terms of a career for those coming from white collar backgrounds. This may result in lowered commitment from prospective teachers who may leave teaching as soon as they find a better alternative.

The education profile of entrants to teacher education shows that prospective teachers are not high achievers academically. Although a vast majority (92%) exceeds the minimum merit indicated in university and college admission criteria (varies between a minimum of at least 45-50%), marks obtained by them in higher secondary school suggest that they are drawn from a pool which does not necessarily meet the entry requirements of other more competitive tertiary level institutions. Despite average and below average performance (and in 3.3% cases poor performance) their entrance in teacher education programs bolsters the belief that teacher education and teaching are marked by eased entry Lortie, 2002 [Lortie, 2002] as suggested earlier. Admission criteria

for B. Ed (Hons) and ADE programs is very non-elitist. It asks for a 'second division' (45-60%) at minimum as compared to the requirement of 'first division' (60% at minimum) for more competitive professions like engineering and medicine. In the absence of reward systems in place to make teaching an attractive profession and the general low perception about teaching socially and culturally, eased entry broadens the pool of potential candidates for teaching as high achieving students usually opt for more competitive occupations. Researchers interested in studying teacher characteristics in other developing countries report similar findings that teaching programs are easy to gain entry into. In Turkey several prospective teachers indicated that failure to enter a program of their choice due to low achievement scores made them choose teaching. Similarly, trainee teachers in Ghana and Lesotho were found to be "academically poorly qualified" and rarely exceeded the minimum merit criteria for admissions Coultas & Lewin, 2002 [Coultas and Lewin, 2002]. Teaching attracts above average students, but not students in the top rank in Botswana.

This has implications for teacher education programs. If prospective teachers are to have subject competence to teach at the elementary level they may require remedial education prior to continuing the regular teacher education coursework. The subject background (science or arts) of entrants is of particular interest to me. The current teacher recruitment policy (2011) by the Government of Punjab declares that to "ensure internationally competitive education especially in the subjects of science, math, computer sciences, and English ... systematic efforts will be undertaken to achieve a ratio of 70:30 between science and arts students." Almost 63% of new entrants in my sample come with an arts background. The low representation of prospective teachers with a science background is a source of concern as this implies subject upgrading of students with an arts background to ensure they have subject competency to teach math and science at the elementary level.

The survey analysis suggests that 53% of the students did not decide to join teaching until after high school. Only 26% went straight from high school to teacher education programs. This indicates that many prospective teachers did not initially intend to go into teacher training after their secondary education. This explanation is strengthened by the fact that 44.6% of respondents

reported that before opting for their current teacher education program they applied to a different program. Many of the student teachers may therefore have chosen teacher education after attempts to gain admission elsewhere. This may be indicative of low commitment on part of those prospective teachers who seem to have chosen teaching as a second option or a 'fallback career. Lortie, 2002 [Lortie, 2002] has an interesting way of explaining the decision timing in teaching. He suggests that some occupations have a narrow decision range-decision to enter has to be made much earlier to undertake preparatory steps such as in the case of medicine and engineering in Pakistan where students decide as soon as they finish middle school. Teaching is not one of them. It has a broad decision range, i.e. candidates can enter at several different points. This may result in attracting those who have to compromise on initial hopes and plans because of varied reasons one of them being choosing teacher as a fallback option. Therefore, decision time seems to be an important background variable in studying motivations to choose teaching.

With regards to teaching experience, although most of the prospective teachers are direct entrants from high school, 32% prospective teachers indicated having some kind of teaching experience. Most of them (59%) taught tuitions while remaining worked as either primary or middle school teachers. Despite having some teaching experience most are untrained teachers (8.6% indicated having formal teacher training). There is no indication in the admission criteria or in the structure of coursework if prior teaching experiences are taken into account which is similar to the case in countries like Ghana and Lesotho Coultas & Lewin, 2002 [Coultas and Lewin, 2002]; Stuart & Kunje, 2000 [Stuart and Kunje, 2000].

# 5.3 Why Choose Teaching?

Overall, analysis suggests that motivations follow a similar trend across programs, semesters, provinces, gender and other subgroups, with make social contribution, ability, and intrinsic values emerging as the highest rated motivations for choosing teaching as a career. These were followed by social influences, personal utility factors, and fallback career.

Intriguingly, the higher rated motivations like intrinsic values, and to a lesser extent ability and

make social contribution, also correlated positively with the satisfaction of entry level prospective teachers with their choice of teaching as opposed to advanced students where these adaptive motivations correlated negatively with their satisfaction with choice. On the other hand, in the case of entry level prospective teachers more personal utility factors like job security, time for family, and fallback career did not correlate strongly with their satisfaction with choice; in the case of advanced students, however, they did correlate more strongly and significantly.

The possible reasons and implications of this finding are discussed in more detail below.

Social influences exerted a relatively weak influence on choosing teaching as a career which is surprising because prospective teachers also reported lower levels of social dissuasion.

With regards to perceptions about teaching, again, overall the trend was similar across all subgroups, where prospective teachers generally see teaching as a high demand but low return-in terms of social status and salary, profession. This is not surprising because of the current socio-economic context and consequently the low status of teaching in Pakistan (Chapter 2 gives a detailed overview of the context of teaching in Pakistan) and in many different countries around the world including some more developed nations Ramsay, 2000 [Ramsey and Review of Teacher Education, 2000]; OECD, 2005 [OECD, 2005]. Perhaps it is because of these perceptions that despite identifying strongly with more adaptive and intrinsic motivations for teaching, overall prospective teachers, especially advanced prospective teachers indicated low satisfaction with their choice of teaching.

This finding has implications for policymakers, in provinces across Pakistan, as they revise teacher recruitment rules<sup>1</sup> following the introduction of the new programs.

Interestingly, all three perceptions of task demand, social status, and salary correlated positively and significantly with satisfaction with choice, although reporting low satisfaction with choice despite higher rating of task demand suggests that perceptions about teaching as a low status

<sup>&</sup>lt;sup>1</sup>For the report of a recent national interchange on revising recruitment rules for elementary teachers

follow thhsi link: http://www.pakteachers.org/sites/default/files/publications/ National\%20Interchange\%20on\%20Recruitment\%20Rules\%20-\%20Reportr.pdf

and low paid occupation influence satisfaction more provided there are no other influences. Interestingly also, despite the lower perception about teaching in terms of status and salary, prospective teachers did not rate social dissuasion too highly. Given that these prospective teachers come from middle and lower middle class households and were unable to secure admission elsewhere may mean that despite the low socio-economic status of teaching, their parents and family members do not think it is a bad career option for their children considering that it is a secure employment with other auxiliary benefits like time for family.

In the following paragraphs I deep dive into motivations and perceptions and put them in the larger context of teaching in Pakistan and other places.

#### 5.3.1 Make Social Contribution

Existing cross country comparative studies around motivations of prospective teachers for joining teaching have often associated social utility values (also known as altruistic reasons in literature) such as make social contribution as dominant motivation among developed country teachers Bastick, 2000 [Bastick, 2000]; OECD, 2005 [OECD, 2005]. On the other hand, researchers have also associated extrinsic or personal utility values more with teachers and prospective teachers from less developed country contexts Yong, 1995 [Yong, 1995]; Chivore, 1988 [Chivore, 1988]. Bastick, 2000 [Bastick, 2000] who found personal utility or extrinsic reasons as most important among prospective teachers' in Jamaica interpreted these results in terms of Maslow's theory of motivation whereby economic differences among contexts explain this difference.

Contrary to findings in other less developed country contexts, prospective teachers enrolled in the ADE and B. Ed (Hons) programs in Pakistan rated social utility values such as 'make social contribution' as most important. This includes factors like: giving back to the society, raising ambitions of unprivileged children, and serving the nation. Interestingly, males stressed this factor a little more than females; those enrolled in ADE programs stressed it more than their B. Ed (Hons) peers; and those with neither parent working as a teacher stressed it slightly more than prospective teachers who have teachers as parents. Both new entrants and advanced prospective teachers rated social contribution as the most important motivational factor in their choice to become a teacher.

Kilinc, Watt and Richardson, 2012 [Kılınç et al., 2012] used the FIT-Choice scale to study motivations among Turkish prospective teachers, and found results similar to the Pakistani case. Authors attributed this finding to the collectivist culture of the Turkish society. This can be one possible interpretation in the Pakistani case also; however, an analysis of responses to the open ended question provides another plausible explanation. One can argue that the dominance of social utility theme is grounded in the religious aspect of the Pakistani culture especially among middle and lower middle class of the society. Many prospective teachers responded to the open ended question by saying 'it's a profession of the prophet;' 'it is a sacred profession and our prophet was also proud to be a teacher.' Despite the poor reputation that teaching has gained due to low student achievement, there is still a continuance of the conception that teaching is a service oriented profession. Prospective teachers also expressed that "through teaching I can help humanity which will make me a batter person also." So, some prospective teachers see contribution to society as a reciprocal action in which they are gaining more than fulfillment. One prospective teacher said "I want to be a good person and also serve my nation."

An interesting theme emerged after an analysis of open ended responses, of advanced semester students, which can be translated into an item to modify the FIT-Choice scale for the Pakistani context. Several advanced students indicated that they "want to improve the education system of the country by applying the new teaching and learning techniques learned in the new programs." Advanced prospective teachers in this sample have been through most of the program and have also been through some practicum experience. They thought that the training they received through the new curriculum will allow them to change teaching and learning for the better. During data collection, a female prospective teacher shared informally "the classroom management techniques we have learned will be very useful. We observed during practicum that in-service teachers (those who have certification/degrees from the old system) do not know much about classroom management. They do not know that there may be several ways to handle discipline issues and that it is important to understand the reason behind disciplinary issues in order to be able to solve

them." It is an encouraging finding. One can infer that teaching as making social contribution is of appeal to also those who do not approve of prevailing practice but believe in the efficacy of teaching when done right. They believe that they have been equipped to do so.

## 5.3.2 Personal Utility Factors

The two personal utility motivational factors; job security, and time for family were rated lower than social utility and intrinsic reasons. This finding is similar to the finding in the Turkish setting Kilin, Watt, & Richardson, 2012 [Kılınç et al., 2012]; finding in the Australian setting Richardson & Watt, 2006 [Richardson and Watt, 2006]; and it was identified more important by females as compared to males. Job security was also a more important theme for those enrolled in ADE programs than B. Ed (Hons) enrollees. Those with teachers as parents as well as those who opted for teaching as a second choice identified it as a stronger reason to become a teacher.

#### 5.3.3 Job Security

A non-monetary reward associated with the occupation of teaching in Pakistan is employment stability and security. Politicization of the occupation and cumbersome bureaucratic procedures make it unlikely for someone to be dismissed once they get a teaching job. Like other government jobs it comes with pension benefits after retirement. As discussed earlier majority of prospective teachers in this sample come from white collar families and several also come from blue collar backgrounds. Such students and their families know what it is like to live with economic insecurities. For those coming from families on the fringes of economy such job security and stable income may be a huge attractor.

Another meaning of job security arose in open ended responses. It appears that teaching is a pragmatic choice for many based on a perceived or actual lack of comparable or better employment opportunities, especially for those at training colleges in rural areas. A male prospective teacher from a college in rural Sindh noted, "I am not sure why you are asking us reasons. It may make more sense to ask a student in Hyderabad (a big city in Sindh) their reason for joining teaching.

Here we don't have another choice. What else are we going to do." This is similar to what Dyer (1996) found out in India.

Another meaning associated with job security is the perception among prospective teachers that it is easier to get a teaching job. As a prospective teacher noted, "Because it will be easier to get a job." Another said, "because I will get a job without having to pay a bribe." For males and females this security may mean different things. Earlier in Chapter 2, discussion around social and economic status of teaching identified that, like other developing countries, in Pakistan teaching has a low-professional status and limited pecuniary incentives Oplatka, 2007 [Oplatka, 2007]. Therefore, teaching is often seen as a supplementary form of income, especially for males who, due to short work days and job security, find the time to pursue other vocations on the side. So, it is not uncommon to see a school teacher in rural areas also spending time farming, raising cattle, or pursuing other forms of work. In urban areas property dealing is a popular supplementary vocation for male teachers. In my own sample some prospective teachers mentioned that their fathers were both teachers and farmers.

For women this security may mean other things. Since majority of the females in my sample were young and single, for them the benefits of a secure job with ample time to give to family is not as important at this stage. For them, as also revealed from open ended responses, job security meant economic independence "I chose teaching because I want to live my life independently." The theme of independence appeared again and again for females. One said "I want to be independent and be able to support my family."

Some females also indicated that domestic conditions demanded that they contribute to the household income. One female prospective teacher noted "My father is a laborer and his health is deteriorating. So I want to get a job soon and help him." Another said "My domestic conditions are not good. I want to help my parents so I want to become a teacher." Another said "my family is not very prosperous and can't buy things we want. So, I want to earn." One reason why women rated job security higher than men may that in the Pakistani socio-cultural setting teaching is one of the very few outdoor jobs women are allowed by family members to pursue. Therefore, the

perceived certainty of getting a job that is secure may be a more important driver for women.

Overall, job security appears to be an important motivational factor for many prospective teachers even though it was not rated as high as some of the other factors. During data collection, reason given by a male prospective teacher helped me interpret this lack of attribution to job security. In his words "it does not sound right to others if we say that we came into teaching because we will not be fired."

#### 5.3.4 Social Influence

Assuming that people may join an occupation only for rational, unconstrained, and carefully calculated reasons is not a valid assumption. People may choose occupations for reasons other than its desirable characteristics. Such reasons have been called 'life contingency' in the literature Ginzberg, 1952 [Ginzberg, 1952]. Social influence is one such reason. Although female prospective teachers did not rate "social influences" as very high (M=3.3, SD=1), an analysis of open ended responses reveals that socio-cultural expectations associated with the role of a woman and family's support were a strong determinant of the choice made by females to choose teaching. Some females expressed that they were not interested in teaching but had joined teacher education because this is the only occupations allowed for girls in their family. One female said "because in our society we have no other choice but to become a teacher." Another said "I did not want to but my mother found out about this program and got me into it. She wants me to be a teacher like her."

Moral objections seemed to be a dominant reason why parents forced their daughters to choose teaching. This is not surprising in the Pakistani context. Majority of the parents still consider it morally wrong for their daughters to study or work with males as to them interaction between sexes is 'dangerous.' Several females said that they belong to a 'noble family' and that "teaching is the only respectful profession for women." Workplace safety issues were also expressed in some open ended responses. Some females expressed that "in our society this is the only safe profession for women." One said "I had no intentions of becoming a teacher, not that I consider it a bad profession. My parents forced me to come here. They said it is a secure profession

for women." Some females seem to have internalized this value imposition by their parent and responded "Because it is the only respectful job for women and the only job they should do."

Family influence does not always mean forced choice to enter teaching. In many cases prospective teachers chose to follow the same occupation as their parents, their siblings, or other family members. Lortie, 2002 [Lortie, 2002] has called this 'continuity within the family.' Prospective teachers in the study sample have 10% mothers and 26% fathers as teachers providing a large number of recruitment agents within the family. When prospective teachers choose an occupation because of identification with a family member, they are also likely to make that choice for the same values as expressed by that family member Lortie, 2002 [Lortie, 2002]. In open ended responses several prospective teachers expressed that they are inspired by family members who are teachers. One female prospective teacher said, "I am inspired by my father because teachers are honest and hardworking and this is a respectable profession." Clearly, the values of hard work and honesty as displayed by the father were instilled in his daughter who sees her father as her role model. Another female said, "My sister is a teacher and she inspired me." Another respondent said "I am inspired by my three uncles who are teachers."

Besides the family influence theme which is a part of 'social influence' factor in the FIT-Choice scale, several other reasons falling within the category of life contingency surfaced in open choice responses. They are categorized and explained below.

## 5.3.5 Socio-economic Constraints and College/University Education

Some prospective teachers mentioned, in open responses, joining teacher education colleges because they are more economical. One student said "After grade 10, I could not get into college because of financial issues so I started teaching at the primary level." Another said "I wanted to go to university but there were income issues." It appears that several prospective teachers who could not enter a university or program of their choice because of financial constraints opted to pursue an undergraduate education at teacher education colleges. One respondent said "I want to become a professor. After this course, I will do MPhil or PhD." Another said "Ultimately I want to

get higher education and become a researcher." Where affordability of teacher education programs provides several bright students the opportunity to continue their education it also means that these prospective teachers see teacher education programs only as transits to other occupations. As Lortie, 2002 [Lortie, 2002] mentions few occupations are in the position to take advantage of the socio-economic situation of entrants. If programs do a good job of socializing these prospective teachers, who have low initial interest in teaching, to teaching they may choose to stay in this occupation.

# 5.3.6 Intrinsic Reasons for Choosing Teaching

Intrinsic reasons were chosen as one of the higher rated motivations by prospective teachers. This factor is composed of three sub-themes; the original intrinsic career value, work with children, and prior teaching and learning experiences. Each of these sub themes are discussed next.

#### 5.3.6.1 Prior Teaching and Learning Experiences

Nespor, 1987 [Nespor, 1987] points out, teachers' own experiences of schooling, particularly their previous interaction with their own teachers, result in certain perceptions, values and expectations of teaching. Lortie, 1975 [Lortie, 1975] explains:

Teaching is unusual in that those who decide to enter it have had exceptional opportunity to observe members of the occupation at work: unlike most occupations today, the activities of teachers are not shielded from youngsters. Those planning to teach form definite ideas about the nature of the role. (p. 65)

Therefore, it is not surprising if prospective teachers identified their own teachers as role models who inspired them to become teachers. Identification with teachers and family members who teach contribute to entry Lortie, 2002 [Lortie, 2002]. One prospective teacher said "All of my teachers were very good so I decided to become a teacher." What is more interesting is that several prospective teachers referred to their prior experiences with their own teachers as 'bad' and said that they would like to become better teachers than their own teachers. One prospective teacher

said "I want to be a good teacher and want to change traditional teaching. I want to serve the community and develop engaged students. I don't want to be like teachers who are bad."

Another said "I was a bad student and used to get a beating from my teachers. I could never memorize anything. I have understood some reasons for that and I want to fix them." This seemed to be a recurrent theme in open ended responses. Another prospective teacher put it like this "When I used to see others teach I wanted to teach too. I have seen strict teachers who are always shouting at kids. I want to teach children in an affectionate manner."

Prior classroom experiences as students were a driving factor more for new entrants who did not have any teaching experiences. Those who came with prior teaching experience referred to those experiences as major influences. A prospective teacher said "I was inspired by my teachers. Also, during my earlier teaching experience parents appreciated how I taught their children." Another said "Although my father wanted me to become a teacher, it was my teaching experience at a private school that added to my keenness."

Because of their immediacy, advanced students, referred to teaching learning experiences in their current teacher education programs. One said "I want to become a teacher to apply the new teaching and learning methods I have learned and develop more engaged students." Another said "Teachers in my practicum school are old school. They discouraged us from using new methods and said that we will soon turn into them. It only makes us more determined to be good teachers." Although in this case the young preservice teacher seemed to become more motivated despite the lack of support shown by practicum schools, this has implications for teacher education programs. A prospective teacher my want to become a teacher for intrinsically motivated reasons but may become disengaged because the process of getting there is not enjoyable (e.g. the passive nature of teaching and learning that happens in the formal teacher training classroom). The same holds for practicum experiences. Pre-service teachers see teaching practice as the most important element of teacher preparation because it provides them with opportunities for actual teaching in "real" learning situations Franke & Dahlgren, 1996 [Franke and Dahlgren, 1996]; Zanting, Verloop et al., 1998 [Zanting et al., 1998]. If the experience makes a pre-service teacher feel like they do not

belong in that role and that their contributions are not valued by others in the school environment then it is commonsensical to think that the experience will be detrimental to the motivation of an intrinsically motivated twenty year old prospective teacher.

## 5.3.6.2 Intrinsic Career Value

Majority of open ended responses revolved around the theme of intrinsic career value. This was especially obvious in the case of early decision makers (those who decided to become teachers before finishing high school); among ADE students; those with teachers as parents; and those who had prior teaching experience. Open ended responses of prospective teachers foregrounded salient intrinsic reasons for becoming teachers, including: "is my childhood dream;" "I have always wanted to be a teacher;" "I love teaching;" "it is a fulfilling profession." Other intrinsic reasons included the interpersonal theme; "I like children;" and a variation "I like to teach children." Interest in children is more aligned with the social definition of being a woman in Pakistan so it is interesting to see that there was no marked difference between males and females on this factor. More women cited liking working with children in their open ended responses.

Similar, intrinsic themes recur in existing studies in developed country contexts. In a comparative study of Norwegian and British pre-service teachers, Kyriacou et al., 2000 [Kyriacou and Coulthard, 2000] reported that the participants cited "enjoying teaching" and "enjoying working with children" as the highest rated intrinsic motivations. In a study of Australian preservice teachers, Watt and Richardson, 2008 [Watt and Richardson, 2008] cite intrinsic themes similar to those occurring in this study-such as a "dream ambition", a calling, and something they were "Supposed to do". Other comments that reflected intrinsic motivation included, "I love teaching students", "I am passionate about teaching and know I can be beneficial to students". Example of Intrinsic reasons given in less developed country context is: "wish to work with children" Evans, 1993 [Evans, 1993].

The subgroup difference I was especially interested in with regards to intrinsic motivation is the difference between science and non-science background prospective teachers mainly because of its immediate policy implications for Pakistan.

In Pakistan students who follow science programs during their secondary school education mostly prefer to pursue science-based jobs, because of the social status and monetary returns.

Looking at the results of the present study, there was a statistically significant differences between science and non-science groups in terms of intrinsic value.Prospective teachers from non-science backgrounds had higher score on intrinsic motivation than science-related preservice teachers. Teaching was likely a fallback option for those science background prospective teachers who could not get into more competitive scientific university degrees leading to professions that provide higher material gains and social status. This result is similar to what has been found out in contexts like Turkey Kilin, Watt, and Richardson, 2012 [Kılınç et al., 2012] where researchers found similar trends among science and non-science prospective teachers.

# 5.3.7 Ability

Similar to findings in the developed country contexts Richardon and Watt, 2006 [Richardson and Watt, 2006] Pakistani pre-service teachers rated ability among the highest rated motivations. This is contrary to what some researcher have noticed in less developed country context, such as in the case of Turkey. Researchers Kilinc, Watt & Richardson, 2012 [Kılınç et al., 2012] found out that ability is not among the highest rated motivations among Turkish prospective teachers. Authors in the Turkish study interpreted this finding as developed country preservice teachers prioritizing career options according to their skill set and interests versus less economically developed countries where security is the biggest concern. This does not hold true for the Pakistani case, where prospective teachers ranked ability quite high. Open ended responses also confirmed the efficacy of prospective teachers with regards to teaching abilities. They responded with statements such as: "Not everyone can be a teacher. It requires certain attributes. I think I can be a good teacher", "I have the ability to teach." These responses make sense coming from those with prior teaching experience who ranked ability higher than the inexperienced group. Similarly, those who are in advanced semesters rated ability higher than new entrants. It may be interpreted that since both groups have preparation and/ or experience of teaching their self-efficacy with regards to their ability is high. This is a positive finding. Drawing upon expectancy-value theory, in which FIT-Choice scale is grounded, Wigfield and Eccles, 2000 [Wigfield and Eccles, 2000]; Richardson and Watt, 2005 [Richardson and Watt, 2005], expectancy for success is influenced by two factors: perceptions of task difficulty and beliefs about one's abilities. That is, people with positive self-concept of ability will have higher expectations of success and are therefore more motivated to invest into a task.

# 5.3.8 Fallback Career

Counter to the widely held belief in the Pakistani society, prospective teachers in this sample did not consider teaching "fallback" career-irrespective of gender, province, program type or other attributes, and despite the fact that 45% also reported having applied to other prograsm before opting for teaching. Sue to this discrepancy as well as due to low reliability of the fallback subscale, I am cautious about interpreting findings related to this motivation.

However, in terms of comparison with other teacher education contexts this finding is similar to what has been found out in other contexts where FIT-Choice was implemented; Australia Richardson & Watt, 2006 [Richardson and Watt, 2006], the Netherlands Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012].

# 5.4 Perceptions About Teaching and Satisfaction with Choice

Prospective teachers perceived teaching as a highly demanding career with low return in terms of salary and social status. We know from the discussion earlier that teaching does not enjoy a high social and economic standing in Pakistan and in many similar contexts. However, the perception about returns is not in line with the Pakistani government's emphasis on improving the status and salary of the teaching profession.

The fact that prospective teachers rated intrinsic values to enter teaching high despite their
perceptions about returns involved in this profession suggest that they seek other rewards that teaching proffer its incumbents. This is reflected through prospective teachers high rating of factors like 'make social contribution', rewards that may provide for the realization of their personal and social values. This finding is similar to Bruinsma & Canrinus, 2012 [Fokkens-Bruinsma and Canrinus, 2012] findings in the Dutch teacher education context. Dutch prospective teachers also saw teaching as a highly demanding but low in return occupation, yet rated intrinsic values highest among motivations for choosing teaching. In the case of Dutch prospective teachers this finding was also reflected in their high levels of satisfaction with choice of teaching as a career.

However, this is not the case with Pakistani prospective teachers. The new entrants did not rate satisfaction with choice very high (M=3.49, SD=1.34). Even more alarming is the fact that advanced students rated satisfaction with teaching as a career choice even lower (M=2.58, SD=1.36) despite rating altruistic and intrinsic motivations higher than new students. It may be that entering prospective teachers have not yet started their practical lives where other demands become more pressing and overshadow the intrinsic and altruistic types of rewards they are seeking now. Knowing that a career is demanding yet low in return and actually living that experience and seeing the contrast with other comparable jobs may influence their decision to stay in teaching. On the other hand, advanced students are closer to entering their practical lives and have seen a glimpse of it during practicum where they were closer to the workplace setting and as close to lliving the teaching experience' as possible during student life. They have interacted with inservice teachers and understand better the work environment awaiting them which may not look as attractive up close. This also has implications for teacher education programs. The following rather strong statement (verbatim translation) was written at the back of the survey questionnaire by an advanced semester prospective teacher "It has been a year but we still have not been tested for the first semester. They are playing with our future in this college. It is a small college. There is no place to hang out. The library does not have any useful books." It may be inferred that teacher education programs may not be providing satisfactory experiences to prospective teachers which

also affects their satisfaction with the choice they made.

There are also other subgroup differences; females, when compared with males, scored higher on satisfaction. They perceived teaching lower in demand, i.e. they scored both expertise and difficulty lower than males. They also rated returns i.e. social status, especially salary higher than males. Where there is a need for further research to understand why females perceive teaching lower in demand than males, their relatively higher rating of returns is consistent with what is already known. As mentioned earlier, culturally teaching (especially at the elementary level) is considered a feminine profession (characteristics demanded of this profession are more widely reinforced for females than for males); and one of the very few professions considered morally correct for women. Several open ended responses as also quoted earlier confirm that women consider teaching a high status occupation for females. Moreover women teachers are generally not the main bread winners in many middle as well as lower middle class households. They generally come from families where a male member is also earning. This is not true for male teachers. Therefore for women monetary benefits may not be as important as other personal utility factors such as job security, and time for family.

ADE students also reported higher satisfaction with choice than B. Ed (Hons) students; and considered teaching relatively higher in return than their peers in B. Ed (Hons) programs.

This may be interpreted as, many B. Ed (Hons) students may have lower initial commitment to continue into teaching than ADE students. Despite it being a teaching degree, many B. Ed (Hons) students may be looking at it as a university bachelors degree and as a step towards higher education. On the other hand, ADE students entered with higher initial commitment knowing that potential career routes after ADE are few. This has implications for the new policy that requires teachers to have a four year teacher education degree. If those who enter four year programs look at it as a bachelors degree and a transit towards higher education, they are more inclined to have lower commitment and thus lower satisfaction with their choice of teaching as a career. They are prone to drop out more than others who start with higher satisfaction.

Another interesting subgroup difference exists between those with prior teaching experience

versus those who have no prior teaching experience. Knowing the low status teaching enjoys socially and economically, those who have some teaching experience reported lower satisfaction than those who entered without any teaching experience. Although the experienced group is continuing into teaching despite lower satisfaction with choice, this may affect the engagement of these teachers down the road. They may continue into teaching because of lack of alternatives but may not be the most productive teachers.

Similarly, those with science backgrounds reported a stronger case of social dissuasion than non-science background group. It is quite likely that the family members and teachers of science background teachers wanted them to opt for more lucrative and socially prestigious science based fields.

### 5.5 Implications for Policy, Future Research, and Conclusion

As is taking place in many countries, this study anticipates that due to the central importance of teacher education and teaching in the context of national and international commitments, as well as the problem of acute shortage of teachers, especially science background teachers, researchers and policy makers will see the value in doing a systematic study of teacher education in Pakistan. As stated in the beginning, this study builds on an on-going conversation and policy initiatives about promoting the social and professional status of teaching in Pakistan. Introduction of the new teacher education programs has been followed up by provincial departments taking steps in revising current recruitment rules. However, most of the policy decisions are being made without any solid evidence base.

The study has a modest goal of providing education stakeholders with a set of relevant data from which to discuss ways to harness educational research resources, and to identify opportunities for developing policies, practices, and resources that will not only attract the best and the brightest into teaching but also retain them as engaged members of the education community.

In the same vein, some recommendations that flow directly out of the findings of this study and are the most relevant to the immediate policy needs of the country are discussed below. The recommendations made below acknowledge that choice of teaching as a career is highly sensitive to the larger socio-economic, cultural and political contexts of the profession in the larger society. Hence it is not reasonable to assume that he entire system can change by changing a few policies and practices. However, taking systematic steps in the right direction is important if Pakistan is to meet its commitment of placing qualified teachers in all classrooms.

# 5.5.1 Attracting a Heterogeneous Group of Prospective Teachers by Taking into Account Motivations

Current conversation around improving recruitment seems to focus only on issues of extrinsic rewards such as salary and promotion scales. Although these are very important consideration also as shown by the findings about perceptions of prospective teachers, the current study shows that the motivations to choose teaching as a career are multidimensional and more complex than just salary and status. As this study observes factors like make social contribution, teaching ability, and intrinsic reasons were influential in the decision to become a teacher.

However, they are not in line with the Pakistani government's emphasis on just improving the status and salary of the teaching profession. Provincial governments might want to consider these important motivational factors while devising policies. Similarly, teacher education programs may want to emphasize these aspects in their admission campaigns and give weight to these important adaptive motivations while making admission decisions. Programs do not have the luxury to filter candidates on the basis of less adaptive motivations, however, knowing what influences the choice of teaching among entrants may help programs foster 'right motives' by taking into account motivations while devising experiences.

#### 5.5.2 Attracting and Engaging Prospective Teachers with Science Backgrounds

This particular recommendation builds on Pakistani government's plans to ensure internationally competitive education especially in the subjects of science, math, and computer science (See for example, the recruitment policy-2011 for science, mathematics, computer science, and English

educators of the Government of the Punjab, School Education Department). The policy document notes that at present there is an acute shortage of science, math, computer science and English teachers. Findings from my study suggest that the participants with a science background were less intrinsically motivated, and reported less satisfaction with their choice of teaching than other groups. This is because science students generally have a better chance of other 'better' job possibilities. Typically those who study science subjects during their secondary school education prefer to pursue prestigious science based jobs like engineering and medicine, while teaching is anecdotally regarded as a last resort.

It may be for the same reason that these students also experience more social dissuasion than others, as the findings report.

On the one hand, Pakistan desires to foster economic development based in the sciences and new technologies (; on the other hand, prospective teachers with subject competency in science appear less invested in teaching. With negative consequences for commitment to stay and engagement of teachers who are less satisfied with their choice of career (Watt & Richardson, 2007), we can say that Pakistan needs to make teaching far more attractive for students with a science background if the goal is to equip and inspire the future workforce in science-based sectors. Unless these students see teaching at the same social status and monetary benefits as other science based professions, they are unlikely to feel motivated to continue.

# 5.5.3 Need for Systematic Research in Teacher Education and Evidence Based Policy Making

A final recommendation is with regards to the conduct of systematic research and use of evidence generated by research to devise policies. Policies using empirical findings gathered through strong research from the local context will be more successful than programs or policies transferred from other settings or built only on the basis of administrative experience.

A first step in solving issues of teacher recruitment and retention is for provincial governments, Department of education, teacher educators, to better understanding the different motivational profiles of those entering teacher education now and why people are not retained in the profession, or become dissatisfied and disengaged; how candidates characteristics interact with their experiences in teacher preparation to affect their motivation and satisfaction; candidates experiences in different preparation programs/routes in Pakistan; comparison of candidates experiences in Pakistan with those in other countries.

As is happening in several countries around the world, researchers in Pakistan should take up a systematic study of teacher education to provide policy makers timely evidence on these immediate policy issues.

#### 5.6 Future Research and Conclusion

The study on which this dissertation is based set out to give an overview of some of the background characteristics of those currently enrolled in the new teacher education programs in three provinces of Pakistan. It draws attention both to what these are and reminds through subsequent analysis and discussion that characteristics such as gender, home background, prior educational qualification and teaching experience, and decision time are all important variables that determine motivations for and perceptions about teaching as an occupation. The study also examined the factor structure of the FIT-Choice scale in the Pakistani context and found out that with some modifications it is a theoretically sound way of studying motivations of pre-service teachers enrolled in the two new programs.

It appears that, as opposed to the Turkish kilin, Watt, & Richardson, 2012 [Kılınç et al., 2012] and Australian contexts Watt & Richardson, 2007 [Watt and Richardson, 2007] Pakistani preservice teachers, enrolled in the new ADE and B. Ed (Hons) programs consider the motivations shape future of children/adolescents, enhance social equity, and make a social contribution as the same. Similarly, for Pakistani pre-service teachers prior teaching and learning experiences does not seem separate from intrinsic values. Also, the construct 'fallback career' needs further fine tuning. The factor structure of the FIT-Choice scale on perceptions seems to function well in the Pakistani pre-service teachers did not distinguish between expertise and difficulty and treated both as a composite 'task demand'. Overall, the use of this standardized scale across different cultures and programs helps discover ways in which different contexts may impact motivations and perceptions.

Overall, among Pakistani pre-service teachers the motivations of make social contribution, ability and intrinsic reasons seemed to be more important. Although considering the socio-cultural and economic context of Pakistan as also discussed in chapter 2, these findings may be interpreted carefully. In terms of perceptions, overall all teachers considered teaching a high demand and low return profession. Some disconcerting findings include lower satisfaction and lower intrinsic motivations of science background pre-service teachers; as well as lower satisfaction of advanced students with their choice of teaching. This has important implications for the retention of these pre-service teachers as they continue.

As Pakistan tries to manage both acute teacher shortage and teacher quality issues, it is important that aspects of motivations and perceptions are taken into account in recruitment campaigns and admission decisions. It is also important that teacher education programs carefully sign experiences so that those who enter teacher education highly motivated do not become dissatisfied with their choice as in the case of advanced cohort in this study.

There are several possible avenues for further exploration. There is a need to further corroborate and fine tune some motivation constructs in the Pakistani context. Future studies on the topic may want to explore additional themes of motivation identified by this study such as 'continuing education', 'continuation of family profession', 'gender roles/cultural expectations', 'case of the still undecided' and 'perceptions about the status of teaching' to study motivations in teaching and teacher education.

Future studies may include other provinces which were not included in this study to see if the scale performance is consistent across other provincial contexts as well. Future studies may also want to fine tune the fallback career construct to increase its reliability. It is also important to do a longitudinal study of motivations to see how and why motivations and perceptions especially satisfaction change through the length of the training. Such a study can be very helpful in informing

programs and policies.

It will also be important to explore the relationship of motivations with other constructs found to be important in the retention, satisfaction and engagement of teachers such as commitment.

APPENDIX

### **Teacher Motivation Survey – Fall 2012**

This survey is part of my doctoral research at Michigan State University, on all first and final semester students enrolled in the ADE and B. Ed (Hons) programs of teacher education in Punjab and Sindh.

I want you to know that:

- 1. I am asking you these questions to better understand how the motivations of prospective teachers for choosing to teach
- 2. The findings of this study will be used for my research work only.
- 3. Your name, the name of your institution, and your responses to the questions in this survey will be kept strictly confidential, and only I will have access to your responses. Your responses will be aggregated for report writing purposes.
- 4. You may skip any questions you do not wish to answer; however, I hope that you will answer as many questions as you can.

If you have any questions about the survey after filling it out, please contact me, Ayesha Razzaque, study director, at 0333-5084352 or <u>razzaqu3@msu.edu</u>.

Questions A1-A17 ask some basic questions about your background.

	Mark only one		
A1	Gender	OMale	OFemale
A2	Age	(years)	
A3	Name of your city/ village		
A4	What is the language spoken at your home?		
A5	What is your marital status?	OMarried OUnmarried ODivorced	

#### A1. Demographic profile

A6	What is highest qualification of your mother?	OLess than FA/ F.Sc OFA/F.Sc OB. Ed OM. Ed OBA/ B. Sc OMA/ M. Sc OMphil/ PhD ONo qualification OOther? (Please specify)
A7	What is highest qualification of your mother?	OLess than FA/ F.Sc OFA/F.Sc OB. Ed OM. Ed OBA/ B. Sc OMA/ M. Sc OMphil/ PhD ONo qualification OOther? (Please specify)
A8	What is the occupation of your mother?	
A9	What is the occupation of your father?	
A10	What was your division/ percentage in FA/ FSc?	

A11	Which of these qualifications did you earn before coming into ADE/ B. Ed (Hons). You can check more than one option.	OPTC OCT OB. Ed OM. Ed OBA OBSc OMA OMSC OFA OF.Sc OOther? (Please specify)
A12	When did you decide to become a teacher?	OBefore finishing FA/ F.Sc OAfter finishing FA/ F.Sc ODuring BA/ B. Sc ODuring MA/ M. Sc ODuring a last job OOther? (Please specify)

A13	Were you working before you got admission in this program?	OYes	ONo			
A14	Did you apply for admission in another program before coming here?	OYes	ONo			
A15	If yes, where did you apply?					
A16	Were you teaching before joining this program?	OYes	ONo			
A17	If yes, at what level were you teaching?	O As a tutor O As a primary school teacher OAs a middle school teacher OAs a secondary school teacher				



Factor 1:

	<ul> <li>"I chose to become a teacher because"</li> <li>For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).</li> <li>(Darken one circle on each line)</li> </ul>	Not at all important						<b>Extremely important</b>
<b>B1</b>	I am interested in teaching	0	0	0	0	0	0	0
B2	Part-time teaching could allow more family time	0	0	0	0	0	0	0
B3	My friends think I should become a teacher	0	0	0	0	0	0	0
<b>B4</b>	As a teacher I will have lengthy holidays	0	0	0	0	0	0	0
<b>B5</b>	I have qualities of a good teacher	0	0	0	0	0	0	0

	<ul> <li>"I chose to become a teacher because"</li> <li>For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).</li> <li>(Darken one circle on each line)</li> </ul>	Not at all important						Extremely important
<b>B6</b>	Teaching allows me to provide a service to society	0	0	0	0	0	0	0
<b>B7</b>	I've always wanted to be a teacher	Ο	Ο	Ο	Ο	0	Ο	0
<b>B8</b>	Teaching will be a useful job to have for me when travelling	0	0	0	0	0	0	0
B9	Teaching will allow me to shape child/adolescent values	0	0	0	0	0	0	0
B10	I want to help children / adolescents learn	0	0	0	0	0	0	0
<b>B11</b>	I like teaching	0	Ο	0	Ο	0	Ο	Ο
B12	I want a job that involves working with children / adolescents	0	0	0	0	0	0	0
B13	Teaching will offer a steady career path	0	0	0	0	0	0	0
B14	Teaching hours will fit with the responsibilities of having a family	0	0	0	0	0	0	0
<b>B15</b>	I have had inspirational teachers	Ο	0	0	0	Ο	0	Ο

	<ul> <li>"I chose to become a teacher because"</li> <li>For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).</li> <li>(Darken one circle on each line)</li> </ul>	Not at all important						<b>Extremely important</b>
B16	As a teacher I will have a short working day	0	0	0	0	0	0	0
<b>B17</b>	I have good teaching skills	Ο	0	0	0	0	0	Ο
B18	Teachers make a worthwhile social contribution	0	0	0	0	0	0	0
B19	A teaching qualification is recognized everywhere	0	0	0	0	0	0	0
B20	Teaching will allow me to influence the next generation	0	0	0	0	0	0	0
B21	My family thinks I should become a teacher	0	0	0	0	0	0	0
B22	I want to work in a child / adolescent- centered environment	0	0	0	0	0	0	0
B23	Teaching will provide a reliable income	0	0	0	0	0	0	0
B24	School holidays will fit in with my family commitments	0	0	0	0	0	0	0

	<ul> <li>"I chose to become a teacher because"</li> <li>For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).</li> <li>(Darken one circle on each line)</li> </ul>	Not at all important						Extremely important
B25	I have had good teachers as role- models	0	0	0	0	0	0	0
B26	Teaching enables me to 'give back' to society	0	0	0	0	0	0	0
B27	I was not accepted into my first- choice career	0	0	0	0	0	0	0
B28	Teaching will allow me to raise the ambitions of underprivileged youth	0	0	0	0	0	0	0
B29	I like working with children / adolescents	0	0	0	0	0	0	0
<b>B30</b>	Teaching will be a secure job	0	Ο	Ο	0	0	0	0
B31	I have had positive learning experiences	0	0	0	0	0	0	0
B32	People I've worked with think I should become a teacher	0	0	0	0	0	0	0
B33	Teaching is a career suited to my abilities	0	0	0	0	0	0	0

	<ul> <li>"I chose to become a teacher because"</li> <li>For each statement below, please rate how important it was in YOUR decision to become a teacher, from 1 (not at all important in your decision) to 7 (extremely important in your decision).</li> <li>(Darken one circle on each line)</li> </ul>	Not at all important						<b>Extremely important</b>
B34	A teaching job will allow me to choose where I wish to live	0	0	0	0	0	0	0
<b>B35</b>	I chose teaching as a last-resort career	0	0	0	0	0	0	0
B36	Teaching will allow me to benefit the socially disadvantaged	0	0	0	0	0	0	0
<b>B37</b>	Teaching is a fulfilling career	0	0	0	0	0	0	Ο
<b>B38</b>	Teaching will allow me to have an impact on children / adolescents	0	0	0	0	0	0	0
B39	Teaching will allow me to work against social disadvantage	0	0	0	0	0	0	0

Part	С:							
	Beliefs About Teaching For each question below, please rate the extent to which YOU agree it is true about teaching, from 1 (not at all) to 7 (extremely). (Darken one circle on each line)	Not at all						Extremely
<b>C1</b>	Do you think teaching is well paid?	0	0	0	0	0	0	0
C2	Do you think teachers have a heavy workload?	0	0	0	0	0	0	0
C3	Do you think teachers earn a good salary?	0	0	0	0	0	0	0
C4	Do you believe teachers are perceived as professionals?	0	0	0	0	0	0	0
C5	Do you think teachers have high morale?	0	0	0	0	0	0	0
<b>C6</b>	Do you think teaching is a highly skilled occupation?	0	0	0	0	0	0	0
<b>C7</b>	Do you think teaching is emotionally demanding?	0	0	0	0	0	0	0
<b>C8</b>	Do you believe teaching is perceived as a high-value	0	0	0	0	0	0	0

	Beliefs About Teaching For each question below, please rate the extent to which YOU agree it is true about teaching, from 1 (not at all) to 7 (extremely). (Darken one circle on each line)	Not at all						Extremely
С9	Do you think teachers feel valued by society?	0	0	0	0	0	0	0
C10	Do you think teaching requires high levels of expert	0	0	0	0	0	0	0
C11	Do you think teaching is hard work?	0	0	0	0	0	0	0
C12	Do you believe teaching is a well-respected career?	0	0	0	0	0	0	0
C13	Do you think teachers feel their occupation has high	0	0	0	0	0	0	0
C14	Do you think teachers need high levels of technical	0	0	0	0	0	0	0
C15	Do you think teachers need highly specialized knowledge?	0	0	0	0	0	0	0

## Part D:

	Your decision to become a teacher For each question below, please rate the extent to which it is true for YOU, from 1 (not at all) to 7 (extremely). (Darken one circle on each line)	Not at all						Extremely
<b>D1</b>	How carefully have you thought about becoming a teacher?	0	0	0	0	0	0	0
D2	Were you encouraged to pursue careers other than teaching?	0	0	0	0	0	0	0
D3	How satisfied are you with your choice of becoming a teacher?	0	0	0	0	0	0	0
D4	Did others tell you teaching was not a good career choice?	0	0	0	0	0	0	0
D5	How happy are you with your decision to become a teacher?	0	0	0	0	0	0	0
D6	Did others influence you to consider careers other than teaching?	0	0	0	0	0	0	0

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