Gender Disparity at Secondary Level Education- A Comparative Study of Urban and Rural Punjab

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Abstract

Gender disparity with regards to educational opportunity has been hindering the intellectual development of females, especially in countries such as Pakistan. The paper, therefore aims to determine the root causes of gender disparity and their role in deterring the enrolment rate of females across Punjab at the secondary level of education. The research used an OLS linear regression model to measure and account for the variables which have affected the female enrolment rates across the rural and urban areas of Faisalabad, Lahore and Rawalpindi. 75 households of each region, urban and rural were used in this study to account for their respective female enrolment rates between the age bracket of 10-15 years and the factors affecting these rates. Various observable variables such as household heads education level, household income, household size, trends of early marriages and availability of adequate schools were considered when measuring and recording the effects of gender disparity on female enrolment rates, focusing mainly on Punjab. The results show that female enrolment rates are higher in the urban areas of Punjab as compared to the rural areas of the same regions, where greater male bias can be observed. The study further recommends various policy options to counter act or diminish this gap to some extent.

Introduction

1.1 Background of the Study

Gender Inequality in education continues to be a critical social problem in many developing countries across the world. Education plays an anchor role in the multidimensional development of every nation, serving as the most important investment that a country makes in its people for a prosperous and successful future. Despite of the rapid progress in the last few years, millions of children still are denied of their basic right to education. This situation is much worse in the case of females. Pakistan is no exception to this phenomenon. The pervasive denial of the human right to education experienced by girls and women across Pakistan is alarming. Pakistan, being the sixth most populous country in the world, faces major gender disparities in the educational sectors. This disparity has not only affected the social and economic development of Pakistan but has also hindered the political development of the nation over the past decades.

It is very unfortunate for Pakistan that this scenario often goes unreported and is widely accepted as a part of culture and religion. Patriarchal values are deeply embedded in the society and heavily govern the social structure and culture of Pakistan. The country faces various socio economic barriers that stand as obstacles in the way of girls from attending schools- poverty, traditional mindsets of parents posing compulsions on the older girls of the family to look after the home and siblings, the popular misconception that girls do not require education and that what is taught in the schools is irrelevant to them, parents having no knowledge or awareness regarding the economic benefits of educating daughters, lack of female teachers and separate schools for girls, all these factors together inhibit the parents from getting their daughters enrolled in schools. The general tendency in the Pakistani society is to invest in male education rather than the female, given the fact that the males are a source of income for the family while the females' place is restrained within the boundaries of the home.

Gender discrimination and inequality in education reduces economic growth and hinders gender development and poverty alleviation. According to the Gender Parity Index of 2014, Pakistan's ranking has slipped from 112 in 2006 to 14, in the economic participation and opportunities for

women criteria. This indicates the threatening level of gender differences that exist in Pakistan and is indeed a worrying sign requiring immediate attention of the decision-makers in order for a positive way forward. The situation is far worse in the rural areas. Females residing in the rural areas are encouraged not to go to school by their parents since they are needed in the home to do the domestic chores. In various rural areas, secondary schooling simply does not exist for the females, leaving them with no option but to prepare for marriage and perform domestic chores. The parents of rural areas are highly uneducated, having no knowledge to guide their daughters about the importance of bright futures and educated lifestyles. Furthermore, these areas are often neglected by the governments in development plans given the unavailability of funds, apathetic cultural insensitivity for girls' education, placing female education at the bottom of the priority list. As a country, Pakistan can never be on the road to progress unless it actively involves and encourages female participation.

1.2 Research objectives

This research aims to investigate the various underlying causes and factors which lead to gender disparity among enrollment rates at the secondary level of education in the region of Punjab. The paper intends to explore how combined gender differences within a household impact decisions regarding the attainment of education for children, specifically for the daughters. The areas of study include several marginalized areas of Punjab along with its major cities- Lahore, Faisalabad and Rawalpindi. The basic purpose of this research is to critically analyze the trends of enrollment rates that exist in the urban and rural areas of these cities, with special reference to analyzing the role of head of family's education, income, household size, preference for early marriages and the availability of adequate schools in the household's nearby areas.

1.3 Research Questions

The following research questions were developed so as to guide the research:

- What are the major factors responsible for gender disparity in urban and rural Punjab? To what extent does this disparity exist?
- What is the impact of such disparity upon the net enrollment rates at the secondary level?

- What policies/mechanisms must be employed in order to address gender inequality in Punjab secondary schools?

1.4 Significance of the Study

This study aims to aid educational officers, policy makers and planners to develop multiple perspectives on bridging the gender gap and providing equal opportunities for both the genders. It intends to assist the policy makers in designing and developing gender sensitive programs so as to promote gender equality and ease access to education for all. Hence for this reason, the existing gender policies have been critically reviewed and analyzed in this research. Lastly, this research also aims to aid parents along with other major educational stakeholders in order to reshape and transform their traditional perspective regarding female education. The empirical results and findings obtained from this research will clearly highlight the significance of female education for community and society development, driving the parents to create an environment that ensures equal access to education for their children of both sexes.

1.5 Organization of Study

The paper is organized as follows: The first section of the paper deals with the introduction, followed by the second chapter of literature review. Section 3 of the papers provides a comprehensive overview of the theoretical framework of relationship that exists between the socio economic factors and enrollment rates by providing an overview of the cultural, political and socio-economic contexts in Pakistan, analyzing the current trends of gender discrimination in the country, allowing the reader to understand the existing position of girls and women. The section further examines the efforts made by the government and other various organizations in order to address the problem of gender disparity in the country and build a sustainable pathway towards achieving the Millennium Development Goals (MDGs). Section 4 covers the data and methodology employed in the research. The fifth section discusses the empirical findings of the research as to what factors causes' gender disparity in education and how and why it leads the females to drop out of secondary education. Section 6 provides recommendations and suggestions for addressing gender inequalities in Pakistan and ways to overcome the cultural and social norms that discriminate against girls and women

Literature Review

2.1 Introduction

This chapter tends to provide an insight of the existing literature on gender disparity in enrolment rates of children and access to education. Despite a variety of research being conducted in the area of gender disparity, it has not been given much importance; this is the case particularly in the countries with Muslim population where there are issues due to certain societal, abstract and religious reasons. In the first section of this chapter, various articles are highlighted that explain the different social and economic determinants of education. The second section lists the evidence of gender disparity in enrolment rates across different levels of education. The last section of this chapter provides a general overview of the scholarly work pertaining specifically to gender discrimination of girls in access to schools and education and its impact on a country's potential.

2.2 Determinants of access to education in households

Arif et al. (1999), focuses on the fact that primary and initial education is a vital component of human wealth and has a fundamental responsibility in the economic growth of a country and its development. The author analyses the effect poverty has on the enrolment rate of primary schools in Pakistan and also determines the gender breach issue in admission at primary level. All the data which is secondary used in this work was collected from the Socio Economic Survey of Pakistan (PSES) from the year 1999. Poverty mark of Rs.705 per capita each month was used built on the cost of necessities; author studied the impact of poverty had on admission in primary school. Enrolment rate of boys in school was not affected by income; on the other hand the chances of a girl going to school were dependent on the handiness of additional financial resources. The author also found out that primary school enrolment was very small i-e 49 percent in rural areas where as it was 72 percent in urban areas. Moreover, it was also discovered that the negative effect of poverty on primary enrolment of girls in the rural areas was higher than that in the urban areas.

According to **Sackey (2007),** the educational capabilities of the parents mold the transmission occurring between generations of human wealth and the welfare of the economy through households. The paper aimed to investigate the major determinants of school attendance in Ghana by applying a probit model and using various children characteristics as explanatory variables. The study was based on data collected by the Ghana living standard survey for the year's 1991 to1992 and the years1998 to1999. The model consisted of children between the ages of 6 to 20. The income hypothesis shed a light on the relation between probability of educational expenditures and wealth status. Apart from this variable, household per capita expenditure, age of children, quality of schooling clarified increased attendance levels of children in Ghana.

Havemen and Wolfe (1995) proposed that issues related to educational expenses can be determined by calculating household assets proportionate to the residents and the timing of their allotment. Other studies have focused on the socio economic factors that lead to educational expenditures deterring enrollment of students. One such example is the study conducted by Donkoh and Amikuzuno (2011) in which a logit model was used to examine the communal and financial reasons of spending on education. The likelihood of the expenses on education in a household was seen as a dependent variable. The households were divided in to two categories. The first category consisted of households with heads having durable assets whereas the second Category included households with headed by females. The analysis showed that the head's educational attainment was directly related to a household's willingness to spend on education of their children.

Smit (2010) also focused on the socio economic aspect of the educational infrastructure on the enrollment rate in India. Education of mother, current employment condition of mother, employment of father and household wealth were used as explanatory variables. He further concluded that all these factors have a 70 percent impact on the enrollment of children in school.

Other studies have focused on the number and gender of siblings in regards to their effect on the percentage of children acquiring education in households. **Parish Willis (1993)** suggests that families dealing with scarcity of resources and difficulties in survival, which have elder siblings, usually get benefit and relief as their elder sibling if female gets married and it helps in relieving them in terms of finance and their monetary tension is relieved.

Dr Min Bahadur Bista (2004) researched about gender inequality and girl's education in Nepal. This research was conducted at country level and hardly any province and local government's districts were taken into account for this research. Out of twenty studies, seven studied the factors which limited female education and hindered in female going to school. The result of these studies talked about various kinds of hindrances girls faced in getting formal education. Various kinds of limitations like psychological limitations, family and cultural boundaries and institutional boundaries existed as indicated by these studies. The scholarships which were given to the disabled and under privileged children were not directed and administered properly and poor planning was evident from undefined criteria and process. Also, these scholarships were not sufficient in monetary terms. The sad thing about these scholarships was that they were not able to increase the enrollment of students in schools because the allotment of scholarships was to the students who were already enrolled instead to those who were bound by some constraints and could not attend it. The impact of scholarships in terms of raising enrolment was minimal because they were given to those who were already in school rather than to those who were not enrolled.

Dr Rae Condi's (2006) report "Review of strategies to address gender inequalities in Scottish Schools had two main aims. The first aim was that the paper studied the literature on gender-inequalities and then studied and evaluated the reasons behind gender inequality to build a clearer view of it. Also it studied and examined the existing approaches and policies formulated and implemented to solve this issue. Various main factors contributed to gender inequality ,for instance the way in which teaching rooms were set up the class environment was organized, trainings, cultural factors, learning processes,   . This paper talked about another literature: In 1989 the EIS generated a 'positive assertion against sexism' which condemned the modern practice of boys getting more advantages through unfair means. They used to get more attention and time from teachers, also received unequal practical experience in fields of computing and sciences. Moreover, the injustice prevailed and was more strengthened when boys were given out-of-routine tasks and they refused and instead teachers provided them with apologies. The gender inequality was ingrained in them and it was evident when they were appreciated and awarded to show behavior not at all similar to girls. (EIS, 1989, cited in Riddell, 2000). In addition to this,   the effects of stereotype   subjects has been seen as impacting negatively on

girls' choices by, for example, acting against their participation in those subjects perceived to be more abstract in the school context but valued by university admissions tutors (Riddell, 1992).

Hazarika (2001) has examined the gender gaps in primary school enrollment by studying the cost of post primary schooling the rural Pakistan. According to this study all cost of schooling were analyzed and as a result it was found that the distance of primary school from residential area was a significant determinant of female primary school enrollment.

Sawada and Locksbin (2001) in their study aimed to analyze the decisions of households related to the schooling of their children in rural areas. This study basically revolved around in investigating the decisions of households regarding the pattern of schooling in the rural areas of Pakistan. The study highlighted the fact that if the number of female teachers hired is increased and schools are located near the villages, this will result in an increase in the rate of female enrollment in primary schools.

Sabir (2002) analyzed that from government's subsidized education services which group benefits. He also studied that how these benefits are distributed between the male and females in Pakistan. The technique used in this study is the "Benefit Incidence Analysis". It was basically used in order to study the gender differences in service provision. Secondary data was used and was based on Provincial Demand for Grants 1999-2000. According to this study, government's subsidies for primary education are pro poor and females are affected in all provinces of Pakistan, facing problems in access to primary educations. The poor income groups are the most affected as they receive less government subsidies as compared to the rich income groups. The government is in favor of those who are in better condition. Government poorly targets the groups which as a result lead to gender disparity in access to subsidies.

Sathar and Lloyd (1994) have studied and discussed the various factors that influence and affect the enrolment of primary school and completion amongst children in Pakistan as well as the level of total expenditures of parents on children enrolled at primary level by giving particular consideration to the feature at household and community levels. The secondary information used is based on the Pakistan Integrated Household Survey (PIHS) held in 1991, which includes a public sample of 4711 households. In order to carry out the analysis of the data, the Multivariate Analysis method was employed. The dependent variables were primary school

enrolment, completion of primary school and ever attended school where as the independent variables are education expenditures in form of tuition, uniforms, books, transportation, private tutor, examination fees and others; distance of school covered by students , child characteristics in form of child's age, number of total children in a household and birth order of a child; parent's characteristics in form of their literacy; household quality in form of mother guidance,, number of male and female adults, household income, household expenditures, household cultivated land and household business; and community features in form of accessibility of public and private schools within one kilometer. The study's results basically indicated that disparity across households provide a major reason for the difference among children in primary school levels. The essential decision related to a child's entry into school and then the completion of the primary level is mostly determined by the parent's education, specifically that of the mothers' along with the total domestic income. A very small percentage of school-age children in Pakistan have literate parents or mothers with sufficient income. The accessibility of appropriate all boys or all girls schools as well as the availability of quality education and schools are fundamental additional factors in children's schooling outcome, specifically for the girls residing in the rural areas. The study also highlighted the fact that greater number of children in a household decreases the probability of primary school completion for children in the urban areas and hence, significantly reduces average educational expenditures. This study is concluded by recommending a considerable increased commitment, effort and cooperation of the government towards primary education, with major emphasis upon the needs of female education. The expected results of such a reform would be greater gender equality, a massive enhancement in human development and possibly decline in fertility.

Khan (1997) says that outcome of economy is higher due to investment in primary education than investment in industry or agriculture. Primary education should have received more attention in terms of development plans, if investment plan was made on proper criteria.

2.3 Evidence of gender bias regarding enrolment of children into schools

Aslam (2003) used independent variables and dependent variables in order to estimate regression. Dependant variable included the total expenditure of education of each individual. Independent variables included family size, education of the head of family and other factors.

According to the report of 2003 inequality results due to differences in regions and living whether in urban or rural areas of Pakistan.

Kingdon (2005) tested why resources are allocated differently between daughters and sons. This research was conducted in India. There is a lot of discrimination; sons are favored more than daughters. Recourses are allocated for sons and daughters get nothing. Even if both genders are treated equally, a very small amount is given to daughters. In this research dependant and independent variables were used. Dependant variables included expenditure of families and independent variables were education of the head of family, age of children. Results show that households do not spend their money in favor of their daughters.

Filmer (2005) studied how wealth and gender affects one another and how they affect the disparities in enrollment of schools. Filmer focused on females in Africa and Asia. He analyzed why females are facing difficulties in receiving education and according to his study the reason for this is large gender and wealth gaps. Wealth gaps are more than gender gaps. Which means wealth is important to eliminate the problems in outcomes of education.

Rahji (2005) he focused on factors of enrollment and gender gaps of the children in rural areas. Author used multistage sampling in order to collect data and for analysis of data he used Probity model. According to the research enrollment of male is more than females. Study also mentions that the education of father's is also very important for males and not for the females where as education of mother's does not affect both. The author also suggested various possible measures and incentives such as increasing subsidies for female education, differential fees and free tuitions.

Aslam (2008) in his study intended to examine whether the intra- household allocation of the educational expenditure in Pakistan favored the males over the females. The author in his study employed individual level data from Pakistan Integrated Household Survey 2001-2002. The paper highlighted two major potential channels of gender bias- firstly, biasness decisions regarding whether to enroll daughters or sons in schools and biasness decisions of education expenditure conditional on enrolling both daughters and sons in schools. The results of this study included enough evidence of significant pro-male biases in both, enrolment decisions as well as decisions regarding how much to spend conditional on enrolment, at Middle and Secondary

School levels. The author concluded that gender disparities were found much stronger and deeply engraved in the rural areas of Punjab and various regions of Baluchistan, NWFP and FATA.

2.4 Impact of gender disparity on a country's potential

Chaudhry (2007) aimed to examine the consequences of gender inequality in education on the economic growth in Pakistan. Secondary sources of time series data drawn from numerous subjects has been employed in this study. A set of regressions have been estimated in this regression analysis which show a moderate explanatory power. The variables which include the overall literacy rate, enrolment ratio, ratio of literate female to male, all have a significant and direct impact on the economic growth. The findings of the study showed that gender inequality in initial education leads to a decline in the economic growth. There is a direct relationship between higher earnings and higher education.

Nasir (2002) discovered the effect of human capital variables on the salaries of regular wage employees. Pakistan Integrated Household Survey 1995-96 is the source of data which provides material on completed years of schooling. In this study, the Human capital model developed by Mincer (1974) and Becker (1964) was employed. According to the estimates, it was revealed that for each added year of schooling qualification, there is approximately an 8 percent return for a wage earner. The co-efficient of experience indicates an augmentation for male as well as female workers for every further year spent in the labor market. In the case of female workers, the effects of literacy and proficiency skills are found less as compared to that of the male workers. The male workers are receiving 10 percent higher wages for their services than the female workers. Unfortunately, female workers are able to get only 3 percent returns. Due to the lack of education, experience and opportunities, the earning of a female worker is always less than the male worker.

Barro (1998) in his study aimed to evaluate the factors of investment and the human capital determinants of growth on a sample of around 100 countries for the period of 1960-1995. The results highlighted that the mean years of secondary and tertiary schooling for the males lead to an enhancement of growth but however, the same could not be said for the female educational years as the relation came out to be insignificant. The author justified his results by saying that

the female education is neither promoted nor encouraged in a country's labor markets because of their respective cultures.

Dollar and Gatti (1999) instituted a study with a focus on finding a pragmatic relation between the economic development of a country and gender disparity in the education sector. Factors such as regional characteristics, religious differences and civil freedom as determinants of gender inequality were used as variables. A set of simultaneous equations were employed in order to identify the determinants of gender inequality and then observe the impact of that inequality on growth of the economy, with the aid of the 'Two Stage Least Squares technique.' The study highlighted three major results- investment in female education positively impacts the economic growth of the country; religious factors influence gender inequality negatively; and lastly, it was noted that increasing income had a favorable Impact on gender disparity.

Klasen and Lamanna (2008) argue that a country's economic development highly depends upon the part women play in building up a society. They further stated that, any hindrance in female education can have a greater adverse effect on the society as a whole. The cross-country report emphasizes that gender disparity in the education sector can even have an adverse effect on the fertility rate, mortality rate and food security. Therefore, the authors suggest tackling gender disparity in education sector which will inevitably aid economic development.

GhulamMoheyuddin's essay (2005)"Gender Inequality in Education: Impact on Income, Growth and Development" states that gender disparity is as an endogenous factor which the society creates itself. He further says that it can be defined by religious factors and preferences as well as civil freedom. Moreover, the essay highlights the adverse effect on economic development of a country due to gender disparity. The author recommends to make education available to all (especially females) in order to counter act the negative impact of gender inequality on the country's economic development. Additionally he puts great emphasis on endorsing gender equality policies in the employment sector as well, which he refers to as the 'win-win' strategies that would increase economic development while decreasing mortality and fertility rate.

Theoretical Framework

3.1 Introduction

This chapter intends to highlight the major concepts that will be employed in the research so as to analyze the gender differential scenario between the urban and rural Punjab, along with a comprehensive overview of the socio-economic, political and cultural context of Pakistan. Existing government policies and efforts have been critically analyzed in order to determine their extent of success. Moreover, the major educational reforms and policies that have been initiated by the Pakistani government have been discussed so as to enable the reader to understand the topic in depth.

3.2 General Situation of Women in Pakistan

Pakistan's constitution lays down equal rights for both, men and women. Unfortunately in reality, the females are hardly given an equal status as their male counterparts. As per the Human Development Report 2007-2008, the rank of Pakistan for Gender Empowerment Measure (GEM) was 82 amongst 93 countries. This rank quantitatively indicates the extent of empowerment of women on a country to country basis. The indicator comprises of a number of factors such as the extent of inequality relating to control over economic resources and degree of economic and political decision making participation. A closely connected concept of GEM is the Gender Related Development Index (GRDI) which reflects the degree of gender disparity in a country. The ranking of Pakistan for GRDI 2007-2008 is 136 amongst 177 countries.

The above statistics clearly indicate that Pakistani society is no different than any other male dominant society, where by the females are confined to their homes in a tightly-controlled society. The factor of patriarchy in the Pakistani society has led to a complete disregard for the females since they are considered to be the inferior ones. According to Isran (2012), one of the fundamental factors that hinders the empowerment, development and autonomy of females in Pakistan is the traditional male perception regarding the role of females.

Various studies and researches have been conducted by different scholars that indicate a dismaying situation of gender discrepancy in Pakistan. According to statistics of 2015, the percentages of girls deprived of education are much higher than the boys; the girls account for 55% of the out-of-school population. According to a survey conducted by United Nations in 2013, it was found that only 46% of females have seen the inside of a classroom. One can simple not ignore the tremendous terrorist threats and attacks that Pakistan faces. Since 1970, there have been 724 attacks out which a majority aimed to disrupt and hinder female education. These gloomy numbers indicate the distressful display of misplaced priorities at the national level.

The status and role of females in a patriarchal and traditional society as that of Pakistan encompasses a great bearing. The society has already explicitly laid down the role of females. Discrimination against women begins from their very inception and continues throughout their lives. All the decision making powers of women are vested in the fathers, brothers and husbands. Figure 3.1 provides an overview of the variety of factors that together contribute to the hindrance in female education and lead to discrepancies in gender disparity among the country.

Structural Causes	Practical Causes
Entrenched hierarchies of power	Lack of female teachers
Failure of the state with regards to service delivery	Child Labor
Unavailability of adequate schools	Domestic work burden
Low budgetary allocation for educational sector	Infrastructure: girls' schools without toilets and boundary walls
Restraints on females' mobility/ inconvenient distances to schools	Inefficiency resource management
Early Marriages	Wastage of financial resources

Fig 3.1 Structural and Practical Causes contributing to gender disparity

3.3 History of Pakistan's Commitments to ensure Equality in Access to Education

National as well as international commitments have been made by Pakistan in order to achieve equality in access to education for all citizens. The country has also signed a number of international agreements and conventions with regards to reducing the gender disparity gap. This section of the chapter briefly describes those commitments and explains to what extent they were successful.

3.3.1 National Commitments

The 1973 Constitution of Pakistan declared Pakistan's commitment in providing education for all. Article 37 of the constitution explicitly states that the stall shall work to reduce illiteracy, make education compulsory and free and also guarantees access to professional and technical education for everyone. However, through an amendment in the constitution, education for the age bracket of children of 5 up to 16 years has been made a fundamental right.

National Plan of Action (2001-2015)

The National Plan of Action was developed by the government in order to address and ensure access to education specifically for the marginalized groups of urban and rural areas, to encourage local community participation, foster a sense of ownership of educational programs and most importantly, to improve the existing quality and relevance of education.

National Education Policy (2009)

The National Education Policy clearly recognizes the fact that the country has fundamental gender disparities amongst its rural and urban areas with regards to attainment of education. The policy intends to strengthen the existing system of education and enable the country to attain its commitments towards 'education for all' and MDGs (millennium development goals).

International Commitments

Pakistan has signed several international conventions as well as agreements pertaining to equal access to education for both genders. These are briefly discussed below:

Universal Declaration of Human Rights (1948)

Pakistan was one of the forty eight members to vote in the favor of UNDHR on 10th December, 1948. According to Article 27 of this declaration, each person has the right to education which must be free at least up to the primary level.

Convention of the Elimination of All Forms of Discrimination Against Women

Adopted by the UN General assembly in 1979, the CEDAW basically laid down the definition of discrimination by defining what it comprised of. It also established an agenda for national action so as to address the problem of discrimination against women. Pakistan agreed to the convention and committed to introduce specific measures to end discrimination in all its forms.

Beijing Declaration and Platform for Action (1995)

The 4th World Conference on Women: Action for Equality, Development and Peace, held by the UN resulted in the Beijing Declaration and Platform for Action. This was adopted by Pakistan 15th September 1995, with a commitment to undertake all such measures resulting in the advancement of women and promoting an environment of gender equality at all levels. More specifically, through this declaration, Pakistan joined hands with the international community to encourage an approach emphasizing upon 'people-centered sustainable development. ... through the provision of basic education, life-long education, literacy and training ... for girls and women" (Article 27), and ensuring "equal access to and equal treatment of women and men in education"(Article 30).

World Declaration on Education for All(2000)

World Declaration on Education for All was basically a pledge taken in Thailand that was formulated by the representatives from 155 countries at the World Conference on Education for All: Meeting Basic Learning Needs. Pakistan, as one the signatories of the pledge, agreed to the fact that each person should benefit from education, given that the educational opportunities are strategically designed to meet the basic needs. This declaration called for expanding the vision of education, with a greater focus on reducing gender discrimination and achievement of universal access to education.

The Millennium Declaration and Millennium Development Goals

Adopted by over 150 countries, the Millennium Declaration comprised of 8 MDGs that pertain to the globe's main development challenges. Along with other countries, Pakistan has agreed to work so asto achieve the MDGs by 2020.

Despite the above mentioned plans and policies, there has been hardly any improvement or progress in the education sector of Pakistan. This is because of the fact that the targets derived by these programs are very ambitions which ultimately fall short for a country like Pakistan. Moreover, the elected representatives of the country who are supposed to improve the education sector in their particular constituencies through effective policy implementation indulge in favoritism by posting the teachers to locations of their choice. This predominant feudal tendency in Pakistan serves as one of the greatest obstacle in education improvement. Pakistan is also a long term victim of inefficient governance and massive corruption, specifically among civil servants and politicians. This again hinders smooth policy implementation in the country because it leads to a lack of trust and coordination between the public officials and political representatives as well as between different departments of the government. Pakistan is often criticized that it has a highly centralized approach towards educational planning. As a result, majority of the policies and plans are developed in Islamabad, the capital, with negligible consultation with the fundamental stakeholders such as teachers, principals and so on. Given such a high degree of centralization, the education policy completely fails to trap the minuteness at the grass root level and hence, remains an alien feature for the educational managers who are actually involved in implementing the policy.

Research Methodology

4.1 Introduction

This chapter intends to explain the research methodology used in the project. For better and clear understanding of the readers, the chapter has been divided into three major sections, where the first one comprehensively explains the research design along with the model employed to examine the questions, the second part highlights the hypotheses while the third talks about the data gathering methods used.

4.2 Research Design

The study comprises of mostly quantitative data along with various in-depth interviews. Although the main source of data is primary, secondary data has also been employed in the research from reports, published articles and websites. Primary data has been collected by performing household surveys of the rural and urban areas of Punjab (Lahore, Rawalpindi and Faisalabad). Along with this, qualitative standardized in-depth interviews were conducted with educational officials of Lahore and Rawalpindi to gather the empirical data regarding the issue in question.

The type of research design to choose in a study entirely depends upon the aim and purpose of the study. Since, most of the variables employed in this research needed to be measured numerically in order to assess the extent of differences in disparity among rural and urban areas, quantitative research was a relatively convenient option. However, interviews with parents, teachers and educational officials were necessary in order to examine their respective perceptions regarding the issue.

4.2.1 Model

As already mentioned above, the research study is broadly inclusive of the quantitative data which will be used to analyze the results and test the hypothesis. The model used for this purpose to test the hypothesis and figure out the extent and differences in gender disparity among the

urban and rural areas will be **'cross-sectional regression analysis.'** As the study includes multiple variables, with information being collected at the same point of the time, hence the basic regression techniques are a wiser option to be used to find the gender disparity at secondary level education in urban and rural areas.

The model employed in the research is:

$$Y = A + B1X1 + B2X2 + B3X3 + B4X4 + B5X5$$

Where Y= gender disparity in urban and rural areas at secondary level education,

 A= constant or Y intercept

Y= Gender disparity

X1= Household Income

X2= Household Size

X3= Preference for Early Marriages

X4= Availability of Schools

X5= Household's head education

Random experimentation in this model has been used to ensure that the results of this model are more accurate

4.3 Variable Description

Figure 4.1 provides a comprehensive overview of all the variables employed in the research, along with their importance to the study.

Comprehensive questionnaires have been developed to cover and gather precise information regarding the below stated variables in order to examine how they impact individual household decisions concerning female education. Each variable will be comprehensively analyzed through both, primary and secondary research. The data for each variable will cover a time span of 8 years so that a cross sectional analysis can be employed to formulate what trends are actually leading to

the phenomenon of gender discrimination in the educational sector. The variables chosen for this study serve as the major socio-economic factors of households that hinder female education in Pakistan.

Variable	Description	Significance
1. Gender Disparity in secondary level education	This is measured by the NEI of females to males in secondary schools. This ranges from 0- 2. Here zero indicates that female enrollment rate in school as opposed to males is the lowest, meaning that there is a very **high level is gender disparity**. 2 is the highest NEI indicating that there is a high female to male secondary school enrollment, implying a **low level of gender disparity**. Please see below for the breakdown on how this variable has been calculated.	This variable helped to calculate the exact extent of comparison in terms of enrollment rate between the urban and rural areas.
2. Household Income	Measure of the total income of one household. This variable is measured in Pak Rupees per month.	The higher the household income, the greater are the chances of the daughters being educated.
3. Household size	Total number of family members in a household	With an increase in household size, the education expenditure will also increase. This is primarily because of the fact that there will be more

		children to educate.
4. Availability of adequate schools	This measures the availability of schools in a 2.5km radius. i.e. 0- 3 schools available would mean inadequate availability of schools. 3- 6 schools available would show adequate availability of school. This a dummy variable for which the first option is assigned a zero and the second option is assigned one.	The geographical conditions of household impact the decision of parents regarding enrollment of daughters in schools. The measurement of this variable is essential in order to measure gender disparity since parents' would not prefer to send their daughters away from home, given the social and cultural and constraints.
5. Early Marriages	This variable measures whether households follow the culture of early marriages or not. This is a dummy variable for which **zero** is assigned for household that do not prefer marriages within the age range of 17- 22. And **one** is assigned for household that prefer marriages within the age range of 17- 22.	The traditional mindset of parents to get their daughters married early denies them of their right to education.
6. Household Head's Education	The variable is a measure of how educated the head of household is, it may be the mother or the father.	This variable will explain to what extent the academic qualifications of the parents impact their decision regarding educating their children,

	This is a dummy variable where zero is assigned for an uneducated head, 1 for a head with only primary education and 2 for ones with secondary or higher education qualifications.	specifically the daughters.

Fig 4.1 dependent and independent variables employed in the research

4.4 Dependent Variable Description

The dependent variable is gender disparity. The **Net Enrollment Index (NEI)of females to males in secondary schools** is used as a measure of gender disparity in secondary level education which is the principle objective of the study. It is calculated by the following formulas.

$$NEI_t = PNE_{ft} / PNE_{mt}$$

Whereby,

PNE_{ft}= Proportion of females students net enrollment in period t

PNE_{mt}= Proportion of males student net enrollment in period t

Data for Proportion of female's student's net enrollment in period t and Proportion of male students net enrollment in period t has been taken from Punjab Government Schools Portal.[1]

4.5 Hypothesis

The following hypothesis is considered in our study for each of the variables.

For **household income**, the following hypothesis is derived:

H_0: there is no significant relationship between gender disparity in the education sector and household income

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[1] Website: http://schoolportal.punjab.gov.pk/schoolcensusNew.htm

H_1: there is a significant relationship between gender disparity in the education sector and household income

For **household size**, the following hypothesis is derived:

H_0: there is no significant relationship between gender disparity in the education sector and household size

H_1: there is a significant relationship between gender disparity in the education sector and household size

For **household head's education**, the following hypothesis is derived:

H_0: there is no significant relationship between gender disparity in the education sector and household heads education.

H_1: there is a significant relationship between gender disparity in the education sector and household heads education.

For **the availability of schools**, the following hypothesis is derived:

H_0: there is no significant relationship between gender disparity in the education sector and availability of schools

H_1: there is a significant relationship between gender disparity in the education sector and availability of schools

For **the preference of early marriages**, the following hypothesis is derived:

H_0: there is no significant relationship between gender disparity in the education sector and preference of early marriages

H_1: there is a significant relationship between gender disparity in the education sector and preference of early marriages.

4.6 Sampling

4.6.1 Site Selection

Our research broadly focuses on the three major areas- Lahore, Faisalabad and Rawalpindi. The major reason behind choosing these districts was because the group members either belonged here or had strong references in these areas hence had more knowledge regarding the area's norms, social structures and values. This factor greatly helped the group in conducting the research and gathering valuable data.

The sample size for our research consists of 75 households for each area of urban and rural Lahore, Rawalpindi and Faisalabad. The sample selection is carried out separately within each rural part considering the nearby villages in Rawalpindi, Lahore and Faisalabad. The stratified random sample is easy to take once the subgroups are identified so we have taken a simple random sample from each subgroup.

We visited these areas and their respective schools personally and interviewed the concerned people including parents, teachers, students, educational officials in order to understand and examine their diverse opinions and views regarding gender disparity in education as they all had different life experiences and behaviors. Our basic purpose and aim was to gather information regarding that one particular factor that actually was the root of gender disparity in education.

4.6.2 Selection of participants

We interviewed fifty five respondents in our research study. Among them, 41 were females between the age group of 15 to 20 years, of which a major were secondary school drop outs. Our sample also consisted of 5 public school teachers who were comprehensively interviewed in order to investigate what according to them lead to such a high female dropout rate at the secondary level. Furthermore, in-depth interviews were also conducted with the educational official of Lahore and Rawalpindi to examine what efforts the government was taking to address the issue and how successful were they.

Hence in this way, our study comprised of various actors and stakeholders who are directly linked to this issue of gender disparity. The major rationale behind this is the fact that a diverse

sample allows a higher possibility of identifying the complete set of factors linked with gender disparity in education. It was fundamental for our research to interview these different actors in order to better understand their views, perceptions and situations and develop a broad and comprehensive understanding of our topic.

4.7 Process of Data Collection and Analysis

In the initial phase of the research, all group members undertook a comprehensive and detailed study of the issue in question and thoroughly went through the existing literature and scholarly work done on the topic. Comprehensive yet precise questionnaires were developed for household surveys and in-depth open-ended questions were prepared for the interviews. The questionnaires for the urban regions of Punjab were distributed amongst the group members themselves to be filled by their relatives and other such contacts and references. For the rural areas, all group members visited the site personally. Written approvals were sent beforehand to the schools and educational officials in order to seek their permission and inform them regarding the purpose and intent of the research. Content analysis of existing reports, documents and studies was conducted in order to support the interviews because according to many scholars such as Patton (19900), employing a mixture of sources is fundamental in order to strengthen the process of data collection and minimize the weakness of a single approach.

As social researchers, it was our responsibility to adhere and maintain ethical conduct and standards. The respondents were ensured that their dignity and privacy would be protected at all costs. During household surveys, each household was initially informed about the purpose of the study so that information could be shared more openly and transparently. The respondents were also informed that they could withdraw any time from the interview or skip any question which they felt was invading their privacy. Lastly, the confidentiality and anonymity of the respondents was maintained at all phases of the research.

Once the process of data collection was completed, the household survey questionnaires were entered into Excel to better organize the data and develop graphical visuals such as pie charts and bar graphs for better understanding of the scenario between the rural and urban areas. Using descriptive statistics, measures such as mean, standard deviation, relative frequencies and

percentages were obtained to determine and compare the net enrollment rates between the three regions in question. Analysis of data regarding Net Enrollment Index and school related supplies such as availability of adequate schools and number of female teachers available were used to answer the research questions of the study. These measures helped to determine the extent to which rural and urban disparities exist.

4.8 Limitations of the Research

Although the research was able to full fill its basic aim and purpose there were some limitations that hindered the potential of the study and that could not have been completely ignored. Firstly, the presence of unobserved variables such as individual intellectual ability and motivation levels of school going children as well as income fluctuations of each and every household could not be measured leading to omitted variable bias. The presence of this sort of biasness can disrupt the result of causal impact on enrollment rates.in addition to this, the study focused on objectifying the results of quantitative data with respect to relationship between female enrollment rates and various observable and measurable variables, ignoring the effects of unobservable variables.

Moreover, due to time constraint the study could not be that extensive or intrusive. The sample size was chosen to fit the needs of the study keeping in view the time required for the study to be completed and the resources available for conducting the research.

Apart from this, comparison between various household on the bases of female enrollment rates can indicate both difference in income and expenditure levels of the two different groups of households. Therefore the households enrolling their female wards to school cannot be taken as the random sample. To solve this issue, variable income and wealth index needs to be added in to the regression equation. Wealth index will comprise of household possessions etc to chalk down a more adequate and justifiable image of each household economically and socially, being used as a sample.

Analysis from Semi structured Interviews

5.1 Introduction

The major findings of the research are presented and analyzed in this chapter. The findings have been categorized following our two major research questions- What are the underlying factors and root causes of the gender disparities that exist in rural-urban areas of Punjab? What is the nature and extent of the gender disparities existing in these areas?

5.2 Factors leading to Gender Disparity in access to Education in Punjab

After conducting unstructured interviews, the study concludes that poverty was one of the leading factors contributing to an increase in gender disparity in Lahore, Rawalpindi and Faisalabad. The discussion below analyses the impact of different factors on poverty.

5.2.1. Poverty

Semi structured interviews were conducted with parents, teachers and students of rural areas of Punjab along with household surveys, covering a range of 150 households from areas of both, rural and urban parts of Rawalpindi, Lahore and Faisalabad. Majority of the respondents identifies poverty as the leading factor behind gender disparities in the education sector.

Figure 5.1 provides the frequency of the respondents in the rural areas who labeled poverty as the major factor behind gender disparities in education.

Research Method	Male Respondents	Female Respondents	Total
Interview	10	13	23
Focus Group Discussion	8	12	20
Total	**18**	**25**	**43**

Figure 5.1 Respondents who identified poverty as the leading factor in gender disparity

A mother of 10, out of which 6 are daughters explained how poverty serves as the root cause of all evil,

"Having a limited income of only Rs 12,000 per month, it is very difficult to get all my children admitted to schools. My daughters assist me with the household chores and often indulge in stitching in order to sustain a living. Which parent would not want their daughters to be educated enough? But poverty has left us helpless." (RukhsanaBibi, Housewife, Lahore)

A teacher from a secondary school in a nearby area pointed,

"In primary education, the level of gender disparity is somewhat ignorable. However, at the secondary level, it is extremely alarming. Parents usually take their daughters out of schools as they are unable to afford the school fees. They prefer to spend their limited money on their sons rather than the daughters as they believe them to be the future breadwinners." (Adeela Khan, teacher at Elite Public School, Faisalabad)

A student, aged 15, citing her own experience, explained:

"I love going to school. My mother wants me to stay at home now and assist her with domestic chores. There is a lot of burden on my father already since we are a family of 18. I will quit school from the next year." (Ayesha Munir, a resident of Rawat, Rawalpindi)

Majority of the respondents of the rural areas believed that poverty was the major factor causing gender disparity. These households face acute conditions- large family sizes with only one breadwinner. The average income of the households is extremely low to sustain a proper living; hence education for them seems a far-fetched dream. Even in rare cases, where the parents were able to afford schooling, the sons were prioritized over the daughters so that the cost that goes into schooling is well retuned. Our research revealed that the poor economic status of the parents adversely hampers female enrollment rate. Approximately, 80 percent of the household heads in the rural areas are farmers, mechanics, laborers or simply unemployed. In a study by Ghana Higgins (2009), the results indicated a very strong correlation between poverty and poor attainment and access to education. Poverty worsens the situation along with the traditional parents' perception that investing in daughters is useless since they will be eventually married, makes the entire scenario even more challenging. As a result, the parents of these areas end up

encouraging their daughters to learn skills such as stitching, knitting, embroidery or any sort of income generating activity instead of acquiring education.

Figure 4.2 provide the average household incomes and household size of our research areas. This table shows the overall comparison between the urban and rural cities of Punjab with regards to Average household income (HHI) and average house hold size (HHS).

	VARIABLES	LAHORE		RAWALPINDI		FAISALABAD	
		URBAN	RURAL	URBAN	RURAL	URBAN	RURAL
1.	HHI(RS)	30640	19060	27440	13540	20560	19020
2.	HS	5	11	5	8	6	7

Fig 5.2 Results of household surveys indicating average household income (HHI) and household size (HS)

According to the Fig. 5.2, the average house hold income of urban Punjab is comparatively higher than the rural Punjab. There is a difference of Rs 9886 in the average income which is denoted by many economic factors such as greater economic opportunities, higher standard of living and better quality education. Moreover, the average household size of urban Punjab is also smaller than the rural Punjab. This denotes the fact that along with limited incomes, the rural areas have large family sizes, making it difficult for them to attain even the basic necessities of life, hence education, specifically in the case of girls turns out to be a far off priority.

Since the urban areas are much more developed, parents residing there have a relatively greater share in income distribution; hence the girls are as likely to attend schools as the boys. On the contrast in rural areas, merely one third girls of the boys' strength attend school.

The above statistics in the tables indicating the low level of income in rural areas clearly highlight the fact that poverty serves as the fundamental factor for the increasing female dropout rate in tribal and rural Pakistan.

5.2.2 Parental Attitudes and Preference for Early Marriages

The empirical findings of the interviews revealed that majority of the parents considered daughter's education a poor investment as compared to the son's since the son is bound to stay with the parents and therefore contribute to household economy. On the other hand, at marriage, the daughter will transfer all her benefits accruing from the acquired education to her husband's family. Hence, the families are a victim of misconception and perceive that investing in daughters' education will only benefit her husband's household, not her parents'. During interviews, many parents also indicated their belief that girls do not require education for their roles as mothers and wives. They believed that it was more essential for girls to learn household and domestic chores in order to prepare themselves for the life that waits after marriage.

A young student, aged 15, shared her story,

"My name is Aminah. I studied till Grade II. I was forced to quit school. My parents do not want to spend money for my education because they believe that girls do not require education." (Amina Khan, a local resident of Faisalabad)

The role of the parents is extremely important and fundamental; specifically in the case of daughter's access to education. Our research reveals that 65 percent of girls left schools because of pressure from families. Household's head education, a key variable in our research, indicated that the heads were simply unaware of the progress that females have made around the world. They were still tapped in the conservative tradition that a girl's place is confined within the boundaries of the home; hence they found simply no benefit in educating them.

A housewife, residing in Rawalpindi, expresses her perceptions about education of daughters,

"Maryam can read and write now. I think that is more than enough for her. She must be grateful to us because we sent her up till Grade I. My parent never sent me to school, however I am living happily today. It is a wiser option for daughters to learn domestic work rather than going to school. Running the house requires domestic skills not education." (Fatima Bibi, a resident of Rawalpindi.)

Majority of the parents' expectations and attitude towards their daughters is that they are future housewives and mothers. To them, these roles do not require any sort of education. They completely ignore the fact that in times of difficulty, it is only education and knowledge that can flourish a person's live. They are unaware regarding how important it is for a woman to be educated in order to establish herself independently, in times of difficulty and misery.

Figure 5.3 shows the percentage of parents in each area who would prefer to get their daughters married between the age brackets of 15 to 21.

	Urban	Rural
Lahore	20%	44%
Rawalpindi	24%	64%
Faisalabad	28%	52%

Fig 5.3 Percent wise allocation regarding preference of Early Marriages

The values above indicate that a greater population in the rural areas of Punjab prefers to get their daughters married at an early age as compared to the urban areas. These values are a clear indication of how many female students are able to attend schools to get an adequate amount of education and how many are unable to do so merely because of the societal or cultural pressure that prevails greatly in the rural areas of Punjab. Various factors can be narrowed down to account for the numbers shown above. In rural areas, the literacy rates and lack of awareness hinders the development of educational facilities for females. The residents of such areas believe that women should not be allowed to attend schools as this would only increase the financial burden of the family with little or no gain.

In addition to this, most of the previous generations in the outskirts of such cities greatly relied on skills rather than knowledge .therefore, they believe that in order to earn money women must acquire some sort of skill or help with the domestic chores and attending schools will hinder any such skills development. Moreover,

On the other hand, residents of the urban areas of Punjab have a greater level of awareness regarding the importance of education. It is believed that women have as much right to knowledge as their male counterparts. Moreover, the role of the household head plays an

important role as well, in the urban areas the households are headed by educated Individuals who give foremost importance to the intellectual development of their children.

5.2.3. Availability of Adequate Schools

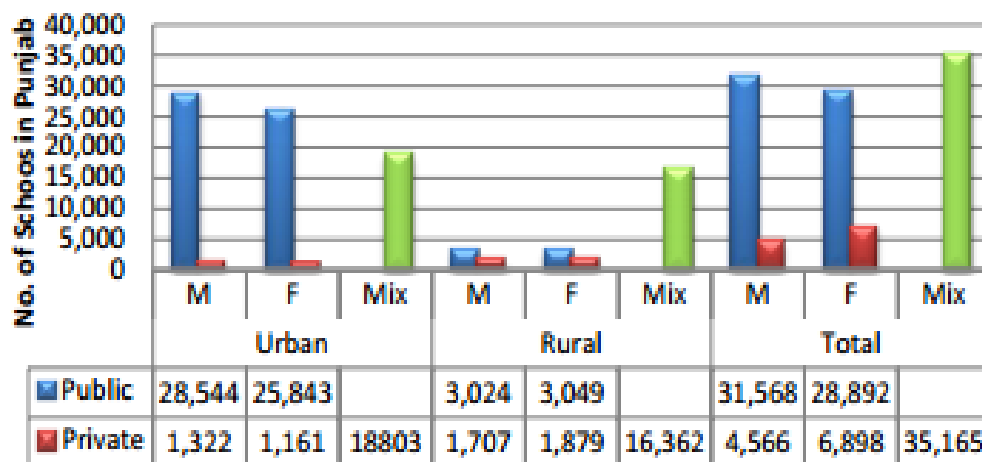|		M	F	Mix	M	F	Mix	M	F	Mix
		Urban			Rural			Total		
■ Public		28,544	25,843		3,024	3,049		31,568	28,892	
■ Private		1,322	1,161	18803	1,707	1,879	16,362	4,566	6,898	35,165

Fig 5.4 availability of schools

School availability is yet another factor hindering the intellectual development of many females in the rural areas. As shown in the figure above, there are more public schools in the urban areas of Punjab as compared to the rural areas. Lack of availability of schools coupled with the unwillingness of some parents to let their female wards to attend schools leads to a high number of illiterate females in these particular areas. Moreover, the unavailability of adequate schools for females is yet another factor contributing to the gender disparity in the education sector, Residents of rural areas who are willing to send their daughters to school are hesitant to send their female wards to co-ed schools due to cultural or religious preferences.

Apart from this availability of female teachers is also a factor contributing to the reluctance of parents to send their daughters to school in the rural areas. In total there are 616, 053 teachers in Punjab, 48 percent of them are employed by public schools and 52 percent by private schools as shown in fig 4.5. Out of the total number of teachers in Punjab,40 percent of them are males and 60 percentfemales, 20.06 percent of which can be accounted for in the rural areas and 42.9 in the urban areas.
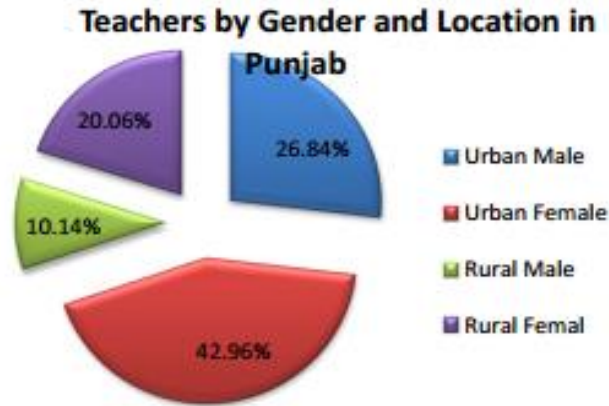
Fig 5.5 availability of female teachers

Region	Total Net Female Enrollment	Total Net Male Enrollment	Total Students	Net Enrollment Females	Net Enrollment Index
Urban Fsl	9482	9065	18547	0.511	1.04
Urban Lhr	9847	5072	14919	0.66	1.94
Urban Rwp	3903	2155	6058	0.644	1.8
Rural Fsl	3827	4605	8432	0.45	0.83
Rural Lhr	255	980	1235	0.206	0.26
Rural Rwp	643	1360	2003	0.32	0.47

Figure 5.6 Net Enrollment Ratios of the research areas

According to the results of the data collected, it is safe to deduce that the highest number of female enrollment has been in urban Lahore with the net enrollment index of 1.95 followed by urban Rawalpindi with 1.8 and rural Lahore with the lowest net enrollment index of 0.26. The net female enrollment rate, also in accordance with the index shows that rural Lahore is the one area lagging behind with respect to female enrollment, followed by rural Rawalpindi and then urban Faisalabad.

Out of the three urban areas, Faisalabad has been the one area that has the lowest net female enrollment rate followed by Rawalpindi and then Lahore. Whereas, Lahore has accounted for the lowest net female enrollment rate in the rural areas, followed by Rawalpindi and then Faisalabad.

The difference of net enrollment index as well as the enrollment rate between urban and rural Lahore indicate that there is colossal gap in female education levels of these two areas of the same city. There is a higher preference of female education in urban Lahore as compared to rural Lahore. This is also true for Rawalpindi and Faisalabad

5.2.4. Educational Officials' Interviews

In-depth interviews were conducted with two educational officials in Lahore and Rawalpindi by the entire group. These interviews were essential since we believe that any policy to address or promote gender equality can only be best understood if the views of those responsible for developing those policies are taken into account. The meetings held with these officials provided the opportunity to discuss the various issues regarding the policies and interventions that are put in place in order to eliminate or bridge the gender discrimination against girls in Punjab.

In an interview with EDO Lahore, we were told that Lahore experiences the minimum extent of gender disparity as compared to other regions of Punjab. There are some organizations that are working actively in Lahore in order to promote gender equality and provide greater opportunities for females. A non-profit organization, knows as The Citizens Foundation, runs schools across Lahore and various other cities, encouraging and promoting female enrollment with the goal of having gender balanced campuses. Another well-known organization, The Kashf Foundation, serves as Pakistan's first microfinance that targets females from low-income areas. These organizations work in coordination and collaboration with one another, along with the help of NGOs and international donors to address the issue of gender inequality. When asked why other regions of Punjab were lagging behind Lahore, the answer came "Whether you call it lack of political will or unawareness of the issue, the government does what it wants. No one can force the government to direct resources to a particular area."

Results from OLS

5.3 Descriptive Statistics

URBAN AREAS					
VARIABLE	NO. OF OBSERVATION.	MEAN	STD. DEV.	MINIMUM	MAXIMUM
HHI	75	26213.33	5150.74	20560	30640
HHS	75	5.3	0.57	5	6
RURAL AREAS					
HHI	75	17206.7	3175.89	13540	19060
HHS	75	8.6	2.08	7	11

Figure 5.3: descriptive statistical figures of urban and rural Punjab

As the above table of descriptive statistics indicates, the average household income of the urban areas of Punjab is approximately twice than those of the rural areas, this consequently results in a higher standard of living and greater purchasing power. Given the fact that the children of urban areas are much more likely to survive infancy and early childhood, they enjoy better health conditions and most significantly, have more educational opportunities than their counterparts in rural areas. This phenomenon is often termed as the 'urban advantage.'

There have been various number of studies by profound scholars that analyzed the factors affecting the enrollment rate among rural and urban areas. A positive co-relation has been identified in the studies between household income and females' enrollment rate. In majority of these studies, the significance of family income effects is relatively larger for the females as compared to the males (World Bank 2002; Pakistan 1998; Sathar and Lloyd 1994).The factor of limited household income is closely linked to poverty which has emerged as a fundamental core issue and a challenge for development of Pakistan. Ghaus Pasha and Jamal (2001) and Arif and

Qureshi (2000), in their study found that the measure of poverty head count accounted to 31% for the rural areas and 27% for the urban ones. The incidence of poverty accounted to 15% for the urban areas which were approximately half of the poverty estimates of the rural areas (World Bank, 2004-05). Given the population of Pakistan which is around 160 million while the GDP (Gross Domestic Product) per capita is US $925 only, 40 million people still reside below the poverty line.

The data for the other focused variable of our research, household size, illustrates that families residing in rural Punjab tend to have greater family sizes as compared to the urban areas. The average household size for rural Punjab accounts to 8.6, which includes families up to a maximum of 11 members. On the other hand, the average household size for the urban areas of Punjab is only 5.6. Considering the overall situation for rural Punjab, an average household size of 8.6 with an average income of around Rs. 17000 per month only, it seems completely illogical to even imagine how such a limited income can be balanced for the basic amenities of life, let alone education.   The two major determinants affecting enrollment rates are family size and sibling sex composition. Behrman, Pollak and Taubman(1982) in their research found that daughters have less access to education in the presence of a brother, conditional on the family size. The historical literature terms this relationship as 'sibling rivalry' between the gender siblings. Our research indicated that greater the family size, the lesser the budget was spent on education. Majority of the parents with large family sizes preferred getting their sons educated over their daughters given the fact that they would be the future source of income for the family. This phenomenon was found to be deeply embedded in rural Rawalpindi and Faisalabad and to a minor extent in Lahore.

5.4 Regression results for urban areas

INDEPENDENT VARIABLE	R1 NEI	R2 NEI	R3 NEI	R4 NEI	R5	R6	R7
Household Income	0.13 (4.71)	0.037** (6.58)	0.048** (6.24)	0.018** (6.73)	-	-	-
House old Size	0.00 *** (-0.08)	0.001*** (-0.085)	0.002** (-0.075)	0.001*** (-0.078)	0.004** (-0.071)	0.002** (-0.079)	-
Head of Family Education	0.76 (0.023)	0.607 (0.039)	0.710 (0.028)	-	0.185 (0.09)	0.140 (0.10)	0.30 (0.08)
Preference for Early Marriages	0.11 (0.17)	0.214 (0.134)	-	-	-	0.29 (0.11)	0.725 (0.038)
Availability of Schools	0.03 ** (0.22)	-	-	-	-	-	0.031** (0.24)

Fig 5.4: Regression results for Urban Punjab

Figure 5.4 reports the OLS results for Urban Lahore, Rawalpindi and Faisalabad. Starting with **regression 1**, the results in the table indicate that the household income has positive effect on the net enrollment index. Greater the household income, greater will be the net enrollment index. If the household income is increased by one unit, the net enrollment index will go up by 4.71 units. The P value is 0.13 which is greater than 0.1 percent which means that the variable household income is insignificant here.

The variable household size has a negative effect on the net enrollment index which is clearly indicated by the negative sign of the coefficient. If the household size is increased by one unit, the net enrollment index will fall by 0.08 units. The P value for household size is 0.00 which shows a very high significance level.

The variable head of family's education (HFEDU) has a positive impact on the net enrollment index which is again shown by the positive sign of the coefficient (0.023). Greater the head of family's education higher will be the net enrollment ratio. If the variable head of family's education is increased by one unit the net enrollment index will decrease by 0.023 units. The P value for this variable is 0.76 which is greater than 0.1 and is thus insignificant.

The variable preference for early marriage has a positive effect on the net enrollment index as the positive sign of the coefficient indicates. If the value of the variable preference for early marriage is increased by one unit the net enrollment index will rise by 0.17. The P value for this variable is 0.11 which is insignificant.

The variable availability of schools has a positive impact on the net enrollment ratio as indicated by the coefficient. The more number of schools is available in an area the more will be the net enrollment ratio. If the value of the variable is increased by one unit the net enrollment index will rise by 0.22. The P value for availability of schools is 0.03 which is less than 0.05; hence it has a higher significance. These results are consistent with the findings of HAZARIKA (2001), who studied that the distance of secondary schools from residential area greatly affects the admissions of females in comparison to males. Many social factors contribute to this as the opportunities for female in terms of commuting are highly limited in comparison to males. Due to security reasons, limited availability of transport opportunities, parents are reluctant in sending their daughters to schools which are located at large distances as sometimes when parents are not able to send their children to school themselves or on school buses, local transport becomes an option however sometimes these buses may be crowded with men and the fear of sexual harassment does not allow females to go to large distances even in cities to get higher education. (Gtoot, 2007)

In the 2ⁿᵈ regression, the results in the table indicate that the household income has a positive effect on the net enrollment index. Greater the household income, greater will be the net enrollment index. If the household income is increased by one unit the net enrollment index will increase by 6.58 units. The P value for this variable is 0.037which is less than 0.05; hence it has a higher significance.

The variable household size has a negative impact on the net enrollment index as shown by the negative sign of the coefficient. Increasing the household size by one unit will decrease the net enrollment index by 0.085. The P value for this variable is 0.001 which is less than 0.01 hence it has the highest significance level. As results show the significant effect of household size on net enrollment index, this comes in line with the study of Kingdon (2005) who studied gender disparity in view of two reasons. The differences in the expenditure of females and males affect the attainment of female education. In some cases, this expenditure is sometimes negative as increased household size does not allow increasing expenditure on females and male education is preferred over females.

The variable head of family's education affects the net enrollment index positively as the coefficient in the table indicates. If we increase the head of family's education by one unit it will increase the net enrollment index by 0.039. A P value of 0.067 shows that it is insignificant as it is greater than 0.1.

The variable early marriage has a positive impact on the net enrollment indexes shown by the coefficient. Increasing this variable by one unit makes the net enrollment index rise by 0.134. It has a P value of 0.214 which is greater than 0.1 and is thus insignificant.

In the **3rd regression**, the variable household income again has a positive impact on the net enrollment index. Making this variable rise by one unit will increase the net enrollment index by 6.24. This variable has a P value of 0.048 which is less than 0.05 and so it has a higher significance level.

Household size in the third regression has a negative impact on the net enrollment index as indicated by its coefficient. Increasing the household size by one unit will make the net enrollment index fall by 0.075. The P value here is 0.002 which is less than 0.05 and hence has a higher significance level.

The variable head of family's education positively affects the net enrollment indexas shown by the coefficient. When increased by one unit, this variable increases the net enrollment index by 0.028. The P value of the variable is 0.710 which is greater than 0.1 and is hence insignificant.

In the **4th regression**, the household income again positively impacts the net enrollment index which is clear from the coefficient. If we increase the household income by one unit it will make the net enrollment index rise by 6.73. The P value of this variable is 0.018 which is less than 0.05 and thus is highly significant.

The household size in the fourth regression negatively impacts the net enrollment index as the coefficient shows. Increasing it by one unit will decrease the net enrollment index by 0.078. The P value of the household size is 0.001 which is less than 0.01 and has the highest significance level.

The **5th regression** shows that the household size negatively impacts the net enrollment index as the coefficient shows. Increasing it by one unit will again decrease the net enrollment index by 0.071. The P value of the household size is 0.004 which is less than 0.01 and has the highest significance level again.

In this regression the variable head of family's education positively affects the net enrollment index as shown by the coefficient. When increased by one unit, this variable increases the net enrollment index by 0.09. The P value of the variable is 0.185 which is greater than 0.1 and hence is insignificant.

In the **6th regression** the household size once again negatively impacts the net enrollment index as the coefficient shows. Increasing it by one unit will again decrease the net enrollment index by 0.079. The P value of the household size is 0.002 which is less than 0.01 and has the highest significance level again.

The variable head of family's education positively affects the net enrollment index as shown by the coefficient. When increased by one unit, this variable increases the net enrollment index by 0.10. The P value of the variable is 0.145 which is greater than 0.1 and hence is insignificant.

The variable early marriage has a positive impact on the net enrollment index as shown by the coefficient. Increasing this variable by one unit makes the net enrollment index rise by 0.11. It has a P value of 0.29 which is greater than 0.1 and is thus insignificant.

In the last regression i-e the **7th regression**, the variable head of family's education positively affects the net enrollment index as shown by the coefficient. When increased by one unit, this

variable increases the net enrollment index by 0.08. The P value of the variable is 0.30 which is greater than 0.1 and hence is the insignificant.

The variable early marriage has a positive impact on the net enrollment index as shown by the coefficient. Increasing this variable by one unit makes the net enrollment index rise by 0.038. It has a P value of 0.725 which is greater than 0.1 and is thus insignificant.

The variable availability of schools has a positive impact on the net enrollment ratio as indicated by the coefficient. The more number of schools is available in an area the more will be the net enrollment ratio. If the value of the variable is increased by one unit the net enrollment index will rise by 0.24. The P value for availability of schools is 0.031 which is less than 0.05; hence it has a higher significance. Though this variable has higher significance, however, by analyzing the coefficient values, it is determined that the impact of availability of schools has comparatively less effect on net enrollment index than other variables like household income. This is perhaps due to urbanization, most of the schools have all the facilities like sufficient teaching staff, good infra-structure available and people are more concerned that their daughters get higher education even if they have to compromise on the standard of infra-structure available to them.

By analyzing all the regressions, it is observed that the values for household size are very significant and the coefficient values for household size gradually increase which show that the impact of household size is very great on the net enrollment index. This is consistent with the study of Aslam (2008) who also talked about intra household expenditure allocations which favored males over females. This trend is even observed in the urban areas as all the values of the variable house hold size are significant and impact net enrollment index to a great extent. Due to different biases that exist whether to acquaint female students with secondary level education or not greatly effects the female enrollment as some households despite having enough resources do not tend to prefer their daughters to get higher education. One of the social factors that hinder attainment of female education is that the cultural norms are perceived in a manner that marriage is the ultimate future of females thus spending on female education does not pay off when the household size is greater and it is better to spend on male education.

The regression results show that head of family education does not impact net enrollment index amongst all the variables as the data value for this variable have been insignificant. This negates

the studies of previous writers like Rahjji (2005) who explained that the fundamental factor which accounts for the differences between female and male attainment of education is the head of family's education; father's level of education is more significant for males as compared to females. However, results show that head of family's education does not affect the net enrollment index in urban areas. This may be because of the increased awareness amongst people regarding the importance of education and they are willing to provide their daughters education even if the head of the family is less or not educated. Thus this variable seems to have a negligible overall effect on the net enrollment index and does not count for the gender disparity in urban areas of Lahore, Faisalabad and Rawalpindi.

The main hypothesis for household income is tested in regression 1, 2, 3,4,5,6 and 7. It is tested to determine its impact on net enrollment index in urban areas. The results are consistent with the findings of Chaudhry (2007) who deduced from his findings that there is a direct relationship between higher earnings and higher education. Larger wealth gaps do not allow females to get higher education and as a result, the disparity between females and males regarding attainment of secondary education increases. We observe that household income's coefficient values are greatest amongst all the variables so this suggests that household income greatly affects the female education in urban areas. With the urbanization, the accessibility problem has been resolved and the advent of private and public schools has provided greater opportunities for female education thus now household income is an important variable which has significant impact on the net enrollment index than other variables. When the gap between income and expenditure on education increases, it becomes difficult for the females to continue their education. With less income, the focus on spending would be more on paying utility bills, fulfilling basic needs however female higher education would not be the priority then.

5.5 Regression results for Rural Areas

INDEPENDENT VARIABLE	R1 NEI	R2 NEI	R3 NEI	R4 NEI	R5 NEI	R6 NEI	R7 NEI
Household Income	0.68 (7.83)	0.749 (6.30)	0.80 (4.87)	0.50 (1.25)	-	-	-
Household size	0.012** (-0.017)	0.009* (-0.18)	0.006* (-0.19)	0.002** (-0.012)	0.013** (-0.017)	0.009** (-0.18)	-
Head of family's education	0.06* (0.062)	0.050** (0.067)	0.05** (0.064)	-	0.05** (0.064)	0.043** (0.068)	0.025** (0.13)
Preference for early marriages	0.74 (0.018)	0.746 (0.018)	-	-		0.79 (0.013)	0.43 (0.04)
Availability of Schools	0.03** (0.12)	-	-	-			0.013** (0.08)

Fig 5.4: Regression results for Rural Punjab

Figure 5.6 represents the OLS results for Rawalpindi, Lahore and Faisalabad in rural areas.

The main hypothesis of the paper is tested in regression 1 and shown in columns (1) of table 2. It tests the impact of household income on net enrollment index.

As shown in regression 1, the coefficient of household income is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household income increases the net

enrollment index by 7.83. The p value is 0.68 which is greater than 0.1 indicating that the results are insignificant.

The coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests that one unit increase in household size decrease the net enrollment index by 0.017. The p value is 0.012 which is less than 0.1 indicating that the results are significant.

The coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.062. The p value is 0.06 which is less than 0.1 indicating that the results are significant.

The coefficient of preference for early marriages is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in preference for early marriage increases the net enrollment index by 0.018. The p-value is 0.74 which is more than 0.1 indicating that the results insignificant.

The coefficient of availability of adequate schools is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in availability of schools increases the net enrollment index by 0.12. The p value is 0.03 which is less than 0.1 indicating that the results are significant.

As shown in regression 2, the coefficient of household income is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household income increases the net enrollment index by 6.30. The p value is 0.749 which is greater than 0.1 indicating that the results are insignificant.

The coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests

that one unit increase in household size decrease the net enrollment index by 0.018. The p value is 0.009 which is less than 0.1 indicating that the results are significant.

The coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.067. The p value is 0.050 which is less than 0.1 indicating that the results are significant.

The coefficient of preference for early marriages is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in preference for early marriage increases the net enrollment index by 0.018. The p-value is 0.746 which is more than 0.1 indicating that the results insignificant.

As shown in regression 3, the coefficient of household income is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household income increases the net enrollment index by 4.87. The p value is 0.80 which is greater than 0.1 indicating that the results are insignificant.

The coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests that one unit increase in household size decrease the net enrollment index by 0.019. The p value is 0.006 which is less than 0.1 indicating that the results are significant.

The coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.064. The p value is 0.05 which is less than 0.1 indicating that the results are significant.

As shown in regression 4, the coefficient of household income is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment

ratio. The OLS estimate suggests that one unit increase in household income increases the net enrollment index by 1.25. The p value is 0.50 which is greater than 0.1 indicating that the results are insignificant.

The coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests that one unit increase in household size decrease the net enrollment index by 0.012. The p value is 0.002 which is less than 0.1 indicating that the results are significant.

As shown in regression 5, the coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests that one unit increase in household size decrease the net enrollment index by 0.017. The p value is 0.013 which is less than 0.1 indicating that the results are significant.

The coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.064. The p value is 0.05 which is less than 0.1 indicating that the results are significant.

As shown in regression 6, the coefficient of household size is negative which indicates the fact that there exists a negative relationship between household income and net enrollment index. The OLS estimate suggests that one unit increase in household size decrease the net enrollment index by 0.018. The p value is 0.009 which is less than 0.1 indicating that the results are significant.

The coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.068. The p value is 0.043 which is less than 0.1 indicating that the results are significant.

The coefficient of preference for early marriages is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in preference for early marriage increases the net

enrollment index by 0.013. The p-value is 0.79 which is more than 0.1 indicating that the results insignificant.

As shown in regression 7, the coefficient of household head's level of education is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in household head's level of education increases the net enrollment index by 0.13. The p value is 0.025 which is less than 0.1 indicating that the results are significant.

The coefficient of preference for early marriages is positive which indicates the fact that there exists a positive relationship between preference for early marriages and net enrollment index. The OLS estimate suggests that one unit increase in preference for early marriage increases the net enrollment index by 0.04. The p-value is 0.43 which is more than 0.1 indicating that the results insignificant.

The coefficient of availability of adequate schools is positive which indicates the fact that there exists a positive relationship between household income and gross enrollment ratio. The OLS estimate suggests that one unit increase in availability of schools increases the net enrollment index by 0.08. The p value is 0.013 which is less than 0.1 indicating that the results are significant.

5.6 Analysis

Even though schooling is a persistent and prevalent problem for all children in Pakistan, this particular analysis was done in an attempt to isolate the various particular reasons for such a gender gap in the education sector. According to the regressions run, poverty or decrease in the overall income of the house head is one of the main factors contributing to such a gap in the education sector with increase in the household income the gap between educational opportunity for females and males seems to decrease. Various studies have supported this argument, one of the most prominent ones include the research conducted by Deon Filmer and Elizabeth king(1999), they used internationally comparable data sets to conclude that wealth or income gaps usually worsen the gender inequality in the education sector. The study focused on how gender and income are interrelated in causing intra national gender inequality at the school level. The study focused on various regions of Africa and concluded that large populations of females

in this particular region were not enrolled in schools due to the economic situations of the households.

Likewise, as deduced from the regression results, household heads education level plays a crucial role in determining the importance given to the education of female children by their guardians or parents. There is a higher probable chance that if the house head is uneducated he would not be in favor of educating his children more so in the case of female children, therefore creating a gender disparity in the education sector. This result has been supported by various studies; one of the most important contributions to this field has been made by Ranji (2005). The research was done using multistage sampling techniques and analyzed through a probit model; it was found that the father's education had a positive influence on the education of male children as opposed to their counterparts. In addition to this various studies conducted at the national level support this argument as well. According to a study conducted by Imran Ashraf and Rizwana parween in rural areas particularly, the probability of a child going to school increases by eight percent with every one year of education of the household head on average. This complimentary relationship between the household heads education and its favorable impact on female education has therefore become an integral part of many studies defining the cause of gender disparity in the education sector.

In Pakistan generally women are not given the same status as their male counterparts, this issue is amplified in rural or remote areas of this region. This phenomenon is backed up by the general belief or perception that women do not possess the same skills or capabilities as men hence for their wellbeing and survival they should be married off at an early age. The results of the findings suggest that this is one of the reasons, there is a colossal gender gap in the education sector even though early marriages is not as strong variable as house hold income in defining the gender gap in the rural areas it still is playing an important role in hindering the intellectual development of many females in the rural region. There are certain studies that have highlighted this issue with regard to gender inequality in the education sector but were not very conclusive. Moreover, UNFPA has stated it to be one of the many reasons why sustainable development goals are taking a longer period to be achieved.

Additionally, availability of adequate schools has also played a role in keeping females out of schools. Improper schooling techniques, ghost schools and unavailability of female teachers has given a disincentive to parents in the rural areas of this region to admit their female wards to schools. According to various research such as the one conducted by Lokshin and Sawada (1999) supply side constraints on village girls' primary education were identified and certain policy interventions such as hiring more female teachers and providing schools in close proximity to villages were recommended to improve the probability of female school enrollment. Likewise, Sabir (2001), put great emphasis on government subsidies being transferred to the low income group and stated that this particular group of Pakistan has been in suffering a great deal due to little or no access to educational facilities.

Finally, household size as a variable in this research has not shown any promising results as seen by the results of the findings. That being said there are various studies that have used this variable to support their hypothesis that household size has a negative impact on the enrollment rate for instance one such study by Ray [2001:10] concluded that a child residing in a household with a large number of children is more likely to be living in poverty than a child residing in a household with few children. Additionally, Sawada and Lokshin [2000:15] had similar results for rural areas that students who could have higher education are from households with a small number of children. This is a reflection of intra-household resource competition. Sathar [1993] narrated that children from households with a large number of siblings are more likely to be drop outs. That being said, these studies focused on higher level education and not on the secondary level which is not the scope of this study.

Recommendations and Conclusion

6.1 Recommendations

Gender disparity is one of the most challenging problems faced by Punjab and more so by the remote or rural areas of this particular region, certain policy options can be recommended and implemented for the betterment of the situations with exhausted disparity in this area. There have been numerous studies that have shown that educating girls is the single most effective policy which can help increase the overall economic productivity, lower infant and maternal mortality, educate the next generation, improve nutrition and promote health. It was estimated by UNICEF that Girls having at least six years of school education are more likely to be able to protect themselves from diseases than the girls who are uneducated. Additionally, mothers who are educated can immunize their children from diseases such as polio 50 per cent more often than mothers who are not educated; therefore children who have educated parents have a 40 per cent higher survival rate. Most importantly, educated women are more than twice as likely to send their offspring's to school as compared to the women with no educational background.

Gender disparity is a suppressing problem especially in the rural areas of Punjab, Therefore it is essential to derive a set of policy options to eradicate or diminish the growing gender disparity in the education sector. Certain misconceptions such as societal and cultural pressures coupled with traditional expectations have plagued the enrolment rate of females in the education sector. For the success of the country, it is crucial to initiate an awareness campaign in the rural areas so that the importance of female education can be highlighted and the need for it to be in sync with the modern requirements of the society can be brought to attention. This can only be made possible with an extensive as well an intensive awareness campaign which will aid in highlighting the consequences of this issue and bring societal change by shedding a light on the economic and social benefits of female education. The campaign would require support from electronic as well as print media. The campaign should target the rural or remote areas of Punjab and its focus should be on the contribution to the intellectual and physical development of the country as a whole.

Punjab government has done a commendable job in taking steps to enlighten the citizens regarding the importance of education as well as to increase the female enrolment rate by initiating programs such as "parho Punjab barho Punjab" through which necessary measures have been taken such as providing financial incentives to increase female enrolment rates and reducing gender disparity in education sector. Having said that, there is a colossal implementation gap, plans that are developed are not executed properly or get dragged out and lose their importance therefore it is crucial to take steps and measures to reduce this gap. Effective supervision can play a pivotal role in minimizing the implementation gap and so can a strict action plan.

Furthermore other measures such as increasing the availably of all girls schools especially in the remote areas of Punjab, aimed at reducing the school to home distance will play an important role in diminishing the gender disparity at every school level. Nonexistence of such adequate school has proven to be one of the high scale reasons why there is less female net enrolment rate therefore keeping this in view it is essential to establish adequate schools in all villages and where it is not economically or otherwise feasible, commute to the schools should be made easy by providing school buses to remote areas of Punjab.

Additionally, policy makers have to take certain steps to provide a safe environment for the female students by establishing a criterion for higher number of female staff especially in the rural areas so that parents feel comfortable sending their children to school. Apart from this a strict low fee policy should be implemented especially in private schools.

Lastly, there is a dire need to draw out a policy option for the lowest income group, that will not only increase the income level of the household head but also his/her education level may it be through vocational classes or through any such other means. Gender disparity reflected in the enrolment rate can be counteracted by initiating a subsidy plan such as that which was initiated in Bangladesh "Bangladesh secondary school scholarship program" where direct public subsidies were given to the citizens to enroll their female wards to school. Policies such as these will help eradicate gender disparity not only in Punjab but generally in Pakistan as well.

One of the most important steps in eradicating this gender disparity is the involvement of the whole government, provincial as well as the federal government. Only through appropriate

legislation, implementation and monitoring policies the gap can be minimized if not diminished completely.

Moreover, there is a need to involve more females in the policy making and implementation process as they can cater to the needs of females in a way that would be harder for their counter parts to understand and also because programs initiated to empower women through women is more welcomed by the female community. Additionally, third parties such as NGO's and other international organizations such as UNICEF can be involved in such policies to come up with better prospects for this region in particular. UNICEF at the moment is coordinating efforts of a broad range of partners at global, regional, and national levels to meet the goals of gender equality in education. It has been involved in raising awareness via in 158 countries and territories and through international media campaigns, by funding and supplies procurement, by assisting governments with policy and problem solving when invited to, and by helping communities to mobilize around these issues, UNICEF is working to ensure girls' right to education is realized. By involving UNICEF government can get financial assistance for the execution of its plans more effectively.

6.2 Conclusion

The main aim of the paper was to identify the factors that have led to gender in equality in the secondary level of education, focusing on the urban and rural areas of Punjab (Faisalabad Lahore and Rawalpindi). The results of the research and the OLS linear regression suggests that factors such as household income, trends of early marriages, parents education and the availability of adequate schools all impact the female enrolment rates, more so in the rural areas of Punjab than the urban areas.

There have been various previous studies that can help confirm these results .One of the most prominent studies was the one conducted by Baluch and shahid (2009) where it was observed that male bias was a prevalent factor leading to lower female enrolment rates between the ages of 5-18. Maitra and Ray (2008) have also suggested in the their paper on India that parents prefer to enroll their male wards to school more as compare to their female children, as there prevails a strong belief that investing in male children will give better financial and physical stability in the future.

Moreover, according to the results of the findings, gender disparity can be observed in all 3 cities irrespective of the urban or rural demarcation. As there is variation in the levels of gender inequality that prevails in the rural areas of the three cities as opposed to the urban areas, rural areas have been observed to have a greater male bias than the urban areas however; rural areas of Lahore have shown slightly less biasness of that manner. To conclude, it would be safe to report gender disparity at the secondary level does prevail to some extent in all regions being studied. Various studies also support the finding of this paper, one such study done in Bangladesh by Asadullah and Chaudhry (2008) is in accordance to the results of the paper that male bias exists irrespective of whether it is in the rural or urban areas, however the extent of it may differ. Finally, it was observed that the factors such as household income and preference of early marriages influenced the female enrolment rates to a significantly higher extent as compared to the other variables of research.

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APPENDICES

Appendix A- Interview Guide for Secondary School Teachers

1. What according to you are the major factors that causing gender disparity in access to education?

2. What is the impact of such gender disparity in education among the students in Punjab Secondary schools?

3. What steps according to you must be undertaken so as to address this issue of gender disparity?

Appendix B - Interview Guide for Educational Officials

1.	What according to you are the major factors that causing gender disparity in access to education?

2.	What is the impact of such gender disparity in education among the students in Punjab Secondary schools?

3.	What is the government doing in order to address the issue of gender disparity? How successful are their efforts?

Appendix C- Household Survey Questionnaire (English/Urdu)

سوالنامہ

1۔ کیاآپکاتعلقگاونسے ھےیاشھرسے؟

2۔آپکےگھرمینکلکتنے افرادھیں؟

3۔ آپکےخاندانیاجاننےوالومینکتنیلڑکیوںنکیشادی 20یا 20سے **کم** عمرمینھوتیھے؟

٤۔ آپ کے گھر کی کل آمدنی کتنی ھے؟

5۔ آپکےگھرکےسربراہکیتعلیمکتنیھے؟

(الف)	۰سال	(ب)	۸سال
(پ)	۱۰سال	(ت)	۱۲سال
(ٹ)	۱٤سال	(ث)	۱٦سال)

6۔آپکے گھر کے ۲.۵ کلو میٹر کے دائرے میں کوئی مناسب سکول (کھلے کمرے، تعلیم یافتا اساتذہ)موجود ہے؟

(الف) ہاں   (ب) نہیں

7۔اگر ہاں،تو کتنے موجود ہیں؟۔

(الف) ۰۔۳

(ب)۳۔٦

(پ)٦سے زائد

Appendix D- List of Abbreviation

HHI	**Household Income**
HHS	**Household Size**
HFEDU	**Household head's education**
GPI	**Gender Parity Index**
MDG	**Millennium Development Goal**
OLS	**Ordinary Least Square**
HDI	**Human Development Index**
GAP	**Gender Gap**
UNDP	**United Nations Development Program**
NEI	**Net Enrollment Index**