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# An Investigation of Gender Disparities in the Enrollment Rate of Pakistan: A Case Comparison between Male and Female Children

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ABSTRACT

#### **ARTICLE INFO**

### Keywords:

Enrolment, Disparities, Gender, Education, Pakistan. This study was descriptive research conducted to identify enrollment trends and gaps in the Pakistan education system over five years and compare gender and sector-wise differences. Descriptive and inferential statistics were used from the enrollment records as per the academic years 2021-2022 to aid in data analysis. Descriptive analysis offered information regarding enrollment alterations according to the educational stage, independent sample t-tests utilized to compare students' enrolment between genders. The study showed variations and inequity in enrolment in concerned education stages throughout the given year, while males dominated the enrollment with females. The results also indicated that the academic years inclined more males than females towards public sector enrollment in the overall mean sense, though it also applies to private sectors. However, the statistical tests also established little difference in the overall enrollment or by gender. Therefore, measures that promote the quality and availability of education should be given focus systematically.

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## **1** Introduction

Education is internationally accepted as one of the fundamental human rights that must be realized. It became incorporated into several human rights charters, such as the Universal Declaration of Human Rights of 1948 and the Convention on the Rights of the Child of 1989 ((Assembly, 1948). Education acts as a way of enhancing the learning, growth, and competency of those in society, hence enabling active participation in society. Human rights and fundamental freedoms should be realized to support the status and growth of individuals and societies regarding gender education. The following can be said to understand the effectiveness of education in the overall national development process (Ahmad et al., 2018). This is because it improves the skill and efficiency of those in workplaces, creating new ideas and technology, among other economic benefits. Education also maintains and enhances social integration by reducing the gaps between individual citizens and making them feel typical belonging and being part of a particular society (Yasmin et al., 2023). Moreover, this means it plays a crucial role in enhancing society's overall welfare by increasing individuals' health, decreasing crime, and promoting active engagement.

Co-education is encouraged all over the world but in Pakistan gender inequalities toward enrollment still exist. That being the case, female students continue to perform poorly than their male peers, which raises one important issue equality in education. Since Pakistan has more than 220 million people all around the country, there are milestones and hindrances to achieving education for all (Rind & Malin, 2024). The government has excellently increased enrollment rates, but the gender goals are still a big challenge. Analyzing the enrollment rates by age and gender, it is possible to state that this indicator remained considerably lower in Pakistan in the case of female compared to males; for example, the Primary enrollment rate is 73% for males compared to 64% for female; Secondary enrollment rate 44% for males compared to 29% for female The data was obtained from the UNESCO Institute for Statistics and Pakistan's Ministry of Education (Haseeb & Habiba, 2023). Nonetheless, the most recent data from the Labor Force Survey 2020-21 reveals that the literacy level was 62.

Similarly, 8 per cent in 2020-21 compared to 62 per cent of students in the previous year, the female students also showed less interest in this subject. Essentially, the literacy rate rose to 4 per cent in 2018-19; males grew from 73.0 per cent in 2018-19 to 73.4 percent in 2020-21, while females were 51.5 percent in 2018-19 to 51.9 percent in 2020-21(Haseeb & Habiba, 2023). The following statistics reveal the prevalence of the problem of gender equality in education as a continuous concern. The following are some of the factors that define or explain these disparities. This is an even more striking reality as culture and traditions tend to focus more on men's education than women's. When families are struggling economically, they would not be able to afford the costs. Sometimes, they must make tough decisions about where to send children to school and which child to send; more often, these decisions will positively affect the boy child (Saleemi & Kofol, 2022). Education difficulties also aggravate early marriage and the scarcity of female teachers and role models. Thirdly, the safety and quality of education in public schools can significantly influence parents' decisions not to send their girl child to school.

### **Research Questions**

• What is the enrollment opening statistics for male and female children at primary and secondary levels in Pakistan from 2018-2023?



- To what extent are students in Pakistan gender deprived; specifically, what are the predominant factors influencing gender disparities in enrollment in educational institutions?
- How do cultural norms such as family prioritization of male education and societal expectations influence the enrollment decisions for males and females?

### **Research Objectives**

- 1. To comprehensively analyze the current gender disparities in educational enrollment in Pakistan.
- 2. To identify and analyze the public and private sectors contributing to these disparities.
- 3. To give comprehensive recommendations of gender disparities in enrollment rates in Pakistan.

## **Purpose and Scope of the Investigation**

The purpose of this investigation is to examine the gender disparities in the enrollment rates of male and female children in Pakistan. By conducting a detailed comparison between the enrollment rates of males and females, this study aims to identify the underlying causes of these disparities and propose actionable recommendations to address them. The study's limitations regarding the explored type of information are the analysis of secondary data sources only. The evaluation of these theories and the quantitative results will give a more comprehensive view of the mechanisms of gender differences in educational participation (Ahmad et al., 2024). The province at the forefront in terms of population and education spending is Punjab, which today has made excellent educational progress. In contrast, the province with the worst infrastructure and education spending in Balochistan still faces harsh conditions. It also discusses public and private sector enrollment. This consultancy will provide meaningful comparison data to understand the regional differences and the impact of various policies and measures.

## **2** Literature Review

## Historical Context of Education in Pakistan

The education system in Pakistan has a long history, and since independence in 1947, the system has passed through various phases and changes. The teachers and students inherited at the time of independence were ill-equipped and distributed disproportionately in favour of the urban areas and males. The level of education was significantly a problem, as was the issue of gender parity in learning obtained at that time. The first educational conference in 1947 contributed to framing the academic policies of Pakistan, which is a general primary education for all children and equal rights for males and females (Yasmin et al., 2023). It could have progressed even more due to these factors, such as financial constraints, political instability, and some culturally rooted traditions of prioritizing male education over female education. Some changes in the structure of education systems occurred during the 1950s and 1960s. In 1959, the Commission on National Education in the UK published a report pointing to the crucial need for women's education and outlining steps on how gender parity might be achieved (Qadir, 2013). Nevertheless, the chances of implementing the recommendations were low, and the differentiation between men and women continued. During the early 1970s, Z.A. Bhutto's administration sought to bring education within federal control by nationalizing educational facilities

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(Yasmin et al., 2023). Despite this, the education policy has been criticized over the years, citing inefficiencies and lack of implementation focusing on rural and female education.

#### **Factors Contributing to Gender Disparities in Enrollment**

Traditions and expectations tied to specific cultures often define the possibilities of obtaining education for males and females. The traditional patriarchal attitudes are still practised around the globe in many regions. When it comes to Pakistan, it is even worse where female education is secondary to male education (Pasha, 2023). The play presents males as potential carriers while the female is portrayed as people meant to stay home and do household chores. This is due to the cultural factors that make families spend more on male children's education than female children (Bizenjo, 2020). Also, cultural beliefs that encourage poor education for the female child, such as child marriage, play a significant role in the lack of educational opportunities for the girl child. This is because families struggle financially; they are usually forced to cut some expenses to make ends meet. In so doing, maless' education is considered paramount compared to that of female. Schooling costs like uniforms, books, and fees, among other expenses, and the forgone earnings due to female staying out of home for domestic chores act as a cost that reduces the probability of female attending school (Ul-Haq et al., 2023). This has a bearing on poverty as it makes it difficult for families to cover the cost of schooling. Hence, more female drops out. In Pakistan, early marriage is common and present in many regions; however, the most affected cultures are found in the rural areas (Batool & Liu, 2021). Child brides are also forced to withdraw from school education because they have to learn the household chores, and society pressures them too. Pursuer's fifth justification is that the legal age for marriage is usually disregarded, aggravating the situation. Early marriage is not only a violation of a girl's right to education but one that makes them take health risks to stop them from building their future. It is, therefore, essential for early marriage to be redressed, seeing that its repudiation will enhance the education of the girl child.

There is still a massive shortage of female teachers in schools in many developing rural areas where parents are doubtful about sending their daughters to school due to cultural beliefs and practices. Women are appointed as female' teachers for cultural/religious reasons. This is particularly conducive to female as female teachers can help create culturally empowering support to retain more learners in school. Poor transport and insecure roads mean significant barriers for female attending school regularly. As highlighted, parents may be worried that their daughters may fall prey to vice, especially in areas with high crime rates or political unrest (Rabia et al., 2019). Being proactive about safety issues and enhancing the physical infrastructure and transport facilities are crucial to boosting enrollment figures of female students. It could improve education quality in public schools, mainly rural classrooms. Another factor is the learning environment with limited infrastructural development, more basic facilities required, and teachers needing more professional training (Ullah et al., 2021). This indicates that most parents may only value the education offered to their female children if the quality meets their expectations. Since education standards and, therefore, children's attendance and dropout rates depend on the quality of learning and teaching, an investment in such areas as teacher training, construction of schools, and learning materials is essential. To enhance gender equity, especially in the teaching profession, measures or strategies should be taken to increase women teachers (Saadat et al., 2022). Forced closure, risk and harassment, poor roads, and long distances to schools also discourage parents from sending their daughters to school.



### **Regional Disparities in Educational Enrollment Rates**

Punjab, the biggest province in terms of population, has significantly improved enrollment figures. Organizations like the Punjab Education Foundation (PEF) launched programs such as free textbooks and other factors that depict higher enrollment. To some extent, these findings might be expected: the gender gap in education remains significant worldwide, and even in Punjab, there are gender inequities (Batool & Liu, 2021). The perceived difference is higher in rural areas as other cultural standards support the gap between males and females (Zubair & Saeed, 2019). There have been efforts to improve infrastructure and the general quality of education, yielding the promised results. Still, it is not noting that for the progress to be on the right path, it is necessary to continue monitoring and implementing numerous interventions. Sindh has also reported increased enrollment, especially in the province's urban areas, though the overall enrollment rates remain low (Sajjad et al., 2022). However, still, the problems that prevail in rural Sindh are almost akin to those in Punjab, where social tradition and financial constraints dominate and block female' education.

The Sindh Education Foundation and other local efforts have prepared attempts to improve the education systems and access, but the system still exhibits colossal inequalities (Singal et al., 2020). To tackle these challenges, a multi-sectoral consultation in collaboration with community development, improved infrastructural facilities, and the vigorous enforcement of policies is paramount. Khyber Pakhtunkhwa has also made efforts to increase access to education for the people, but this area needs more security crises and traditional restraints. The enrollment rates concerning female' education remain lower than males', especially in rural and tribal locales (Zeb et al., 2021). Such strategies as the KP Education Sector Plan are currently underway to address these concerns, but there is a constant Muslim security threat. Local communities need to take ownership of education improvement. Education is an essential determinant of individuals' health and society's uplift, especially in KP, where local governance and community participation are effective ways of enhancing educational integrity (Gul et al., 2021). However, among all provinces, Baluchistan is facing the worst challenges in terms of academic enrollment. This province is one of the worst provinces in Pakistan regarding enrollment ratio, and the position of female could be improved. Various factors continue to play an impediment to education, with training and patriarchal systems choking female' education. Due to the weak infrastructure and scarce education facilities (Akram & Yang, 2021). Schemes such as the Baluchistan Education Project support an increase in coverage and the quality of education; however, potential enhancement might be heightened given the circumstances existing within the region. To make sustainable changes, it is necessary to formulate and implement strategies that cover sociocultural factors, the need for better infrastructure, and the promotion of people's active participation.

#### **Comparative Analysis of Provinces**

Comparing the provinces, it was found that the enrolment of students and gender are unequal, and measures taken to address them differ from province to province. This is important since interferences and policy changes that could otherwise enhance the state of female' school enrollment and attendance can be designed by educators, policymakers, and other related stakeholders with this information (Halai & Durrani, 2021). Further, education entrepreneurship, quality, and access in Punjab have enhanced significantly. Specific reasonable endeavours have been made in this regard, such as the Punjab Education Foundation (PEF); the enrollment levels have improved considerably now (Javed & Awan, 2020). Other factors that have been pulled include government infrastructure development policies and teacher training. There has been advancement in women's rights, although



they are about to be violated as they have been observed to be violated mainly in rural regions (Murtaza & Hui, 2021). Hence, community practice continues to influence the transformation of female' education up to this point. Fighting these challenges involves unceasing public education, awareness creation, and legal reforms as the world prepares to achieve ideal policy interventions (Khalid et al., 2020). It also has limited access to education enrolment rates in Baluchistan province, the lowest of any province in Pakistan. The significant issues are the acculturation of responding organizations, our Cultural values of `keeping secrets' from outsiders, and the inability to generate sufficient economic capital and infrastructure (Bashir et al., 2023). The area also has some of the compounds that hamper the education of female due to their tribal and patriarchal nature. Even with these agencies and organizations, measures like community schools and NGO intercession to resource the enrollment status, things are progressing slowly (Siraj Bashir et al., 2022). They suggest formulating more general staking efforts for sociocultural factors, socio-technical systems, and socio-political instruments that incorporate a community-based action approach that could enhance organizational factors most effectively.

## **3** Materials and Methods

### 3.1 Research Design

To assess the gender difference in the initiation and enrolment of male and female children in schools in Pakistan, this study adopts a positivist research paradigm. Thus, the present study is expected to compare case studies and explore underlying factors that may contribute to the mentioned disparities (Ugwu et al., 2021). The analysis of the presented topic was based on Pakistan, but it is crucial to discuss regional differences and policy implementation. This analysis will give a more enlightened perception after acknowledging the different factors that lead to adopting the gender aspect of enrolment in education.

### **3.2 Quantitative Approach**

This research adopts the quantitative approach because it offers a sequential and evidencebased examination of social occurrences using numerical, algebraic, or computerized procedures (Kumatongo & Muzata, 2021). Given the focus on enrollment rates, the research will embrace quantitative research design because it enables accurate measurement of findings and data analysis relating to the research questions. It makes it possible to work with enormous amounts of data, and the results can be considered more specific, giving us the possibility to speak about general tendencies in Pakistan's population.

## **3.3 Data Collection Methods**

The study proposes employing secondary research as a data collection method. This method is chosen because most data is easily accessible and sufficiently accurate from different sources like business reports, academic papers, and governmental statistics. Secondary sources are also less time-consuming and less costly than primary sources since they involve exploring enrollment trends and inequalities in a general way. The data sources used for the present analysis include Pakistan's Ministry of Education, Pakistan Education Statistics 2021-22, and the Labor Force Survey (LFS) 2020-21. These sources contain enrolment trends, literacy, and other essential education statistics at the regional and national levels.



## **3.4 Data Analysis Methods**

To analyze available data regarding gender distribution in educational enrollment, descriptive statistics analyzed measurements obtained from data collection to provide an overview and description of the collected data. This included parameters that average and describe data spread, such as the mean and standard deviation. It indicated problems such as complete enrollment, male enrollment, and female enrollment in primary and secondary school. Statistical analysis was involved using T-tests to determine the statistical difference in enrollment rates between male and female children (Beyer, 2021). This test was used to establish whether or not there is sufficient variation in the enrolment rates depending on the gender of students. To analyze data collected from male and female children as two independent samples, this study employed independent samples t-tests to examine whether there is adequate statistical evidence to infer that the population means of the two independent groups are significantly different. In this study, statistical analysis was undertaken through SPSS (Statistical Package for the Social Sciences), a commonly used data analysis method. SPSS performed functions, including checking and correcting mistakes and omissions to ensure input accuracy and making simple statistics that give a brief insight into the data. Descriptive and inferential analysis involving the t-test technique was used as appropriate to identify significant differences between groups. Since, the research does not involve human-subject directly. Therefore, no informed consent were taken.

### **4 Results and Discussion**

The result and discussion reconstruct information and statistics concerning enrollment patterns and gaps in Pakistan's education system. Descriptive and inferential statistical data analyses are included, providing results about enrollment data in aggregate form and throughout concern, that is, five years, and statistical tests comparing enrollment between gender and educational sectors. The information and findings leading to this discussion will, therefore, allow the elaboration of a better perception of the enrollment dynamic, the existing literature regarding gender differentials, and sectorial analysis in Pakistan's educational environment to enhance the comprehensibility of the existing and potential barriers and opportunities in Pakistan's educational system.

	Table 1: Five-Year Comparison of Enrollment in Pakistan							
Stage	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022			
PrePrimary	9,488,591	9,603,31 3	8,953,776	8,351,1 70	8,966,442			
Primary	1 8,663,756	1 9,441,944	1 9,608,258	20,078,071	1 9,894,231			
Middle	6,422,425	6,728,452	6,957,486	7,324,586	7,664,629			
Total	15,911,016	6728452	15,911,262	27402657	16,631,071			

#### **4.1 Descriptive Analysis**



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Figure 1: Time series Bar chart

The table and Figure 1 present a five-year comparison of enrollment figures at various educational stages in Pakistan from 2017 to 2022. Pre-primary enrollment shows fluctuations, starting at 9,488,591 in 2017-2018 and increasing slightly to 9,603,313 in 2018-2019, before declining to 8,351,170 in 2020-2021 and then rebounding to 8,966,442 in 2021-2022. Primary enrollment exhibits a general upward trend, beginning at 18,663,756 in 2017-2018 and reaching a peak of 20,078,071 in 2020-2021, though it slightly decreased to 19,894,231 in 2021-2022. Middle school enrollment steadily increased from 6,422,425 in 2017-2018 to 7,664,629 in 2021-2022, indicating consistent growth. Total enrollment figures display inconsistencies, with significant data discrepancies (e.g., 15,911,016 in 2017-2018 versus 6,728,452 in 2018-2019), suggesting potential data errors. Despite these inconsistencies, the overall trend indicates an increase in total enrollment over the five years.

	0 1			
Enrolment 2021-22	Gender	Mean	Std. Deviation	Std. Error
				Mean
Total Enrollment	Male	2850443.14	3484379.656	1316971.720
	Female	2367457.14	3219890.529	1217004.227
Public Sector Enrollment	Male	1635208.0000	1995089.21965	754072.84551
	Female	1412480.2857	1922273.98574	726551.27400
Private Sector Enrollment	Male	1180302.8571	1449245.66433	547763.37378
	Female	927382.8571	1285931.53471	486036.43484

Table 2 provides descriptive statistics for enrollment figures in Pakistan for the academic year 2021-2022, broken down by gender and type of educational sector (public vs. private). The mean total enrollment for male is 2,850,443.14, with a standard deviation of 3,484,379.656 and a standard error of 1,316,971.720, indicating significant variability. For female, the mean total enrollment is lower at 2,367,457.14, with a standard deviation of 3,219,890.529 and a standard error of 1,217,004.227, also showing considerable variability. In the public sector, males have a mean enrollment of 1,635,208.000, with a standard deviation of 1,995,089.220 and a standard error of 754,072.846, while female have a mean enrollment of 1,412,480.286, a standard deviation of 1,922,273.986, and a standard error of

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726,551.274. This indicates that males are more enrolled in public schools than female, with both groups showing high variability. The private sector's mean enrollment for male is 1,180,302.857, with a standard deviation of 1,449,245.664 and a standard error of 547,763.374. Female have a mean enrollment of 927,382.857, a standard deviation of 1,285,931.535, and a standard error of 486,036.435. These figures also reflect higher enrollment for male and female, with substantial variability. Overall, male have higher mean enrollment than female across all sectors, with significant variability in the data.

## 4.2 Inferential Analysis

Table 3: Independent sample t-test of Total Enrollment						
t-test for Equality of Means						
Total Enrollment	t	t df Sig. (2-		Mean	Std. Error	
			tailed)	Difference	Difference	
Equal variances assumed	.269	12	.792	482986.000	1793185.378	
Equal variances not	.269	11.926	.792	482986.000	1793185.378	
assumed						

Table 3 presents the results of the independent sample t-test to compare the two groups' total enrollment. The t-test assesses whether the groups have a statistically significant difference in mean enrollment. For both cases, assuming equal variances and not assuming equal variances, the t-value is 0.269. The degrees of freedom (df) are 12 for the equal variances assumed case and approximately 11.926 for the equal variances not assumed case. The p-value (Sig. 2-tailed) is 0.792 in both scenarios. With a p-value more significant than the significance level of 0.05, there is insufficient evidence to reject the null hypothesis. Therefore, we conclude that there is no statistically significant difference in the mean enrollment between the two groups. The mean difference and standard error difference remain consistent across both tests.

Table 4: Independent sample t-test of Public Sector						
t-test for Equality of Means						
Public sector Enrollment	t d	df	df Sig. (2-	Mean	Std. Error	
			tailed)	Difference	Difference	
Equal variances assumed	.213	12	.835	222727.71429	1047140.20555	
Equal variances not	.213	11.983	.835	222727.71429	1047140.20555	
assumed						

Table 4 displays the outcomes of an independent sample t-test conducted to evaluate the equality of means in public sector enrollment between two groups. For both scenarios, assuming equal variances and not assuming equal variances, the t-value is 0.213. The degrees of freedom (df) are 12 when equal variances are assumed and approximately 11.983 when equal variances are not assumed. The p-value (Sig. 2-tailed) is 0.835 in both instances. Given that the p-value is more significant than the significance level of 0.05, there is insufficient evidence to reject the null hypothesis. Therefore, we conclude that the two groups have no statistically significant difference in the mean public sector enrollment. The mean difference and standard error difference remain consistent across both tests



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Table 5: Independent sample t-test of Private Sector						
t-test for Equality of Means						
Private sector Enrollment	t df		Sig. (2-	Mean	Std. Error	
			tailed)	Difference	Difference	
Equal variances assumed	.345	12	.736	252920.00000	732308.76660	
Equal variances not	.345	11.832	.736	252920.00000	732308.76660	
assumed						

Table 5 presents the results of an independent sample t-test assessing the equality of means in private sector enrollment between two groups. In both scenarios, assuming equal variances and not assuming equal variances, the t-value is 0.345. The degrees of freedom (df) are 12 when equal variances are assumed and approximately 11.832 when equal variances are not assumed. The p-value (Sig. 2-tailed) is 0.736 in both cases. Since the p-value exceeds the significance level of 0.05, there is insufficient evidence to reject the null hypothesis. Consequently, the two groups have no statistically significant difference in the mean private sector enrollment. The mean difference and standard error difference remain consistent across both tests.

## **5** Discussion

These results derived from the descriptive and inferential comparisons of enrollment profiles of Pakistan education and inequality are beneficial in understanding the characteristics of education enrollment and the current gender and sectorial disparities. These findings can be comprehended and analyzed by previous works that can help explain them and make meaningful contributions to its discussion to understand better the possibilities and difficulties of Pakistan's education systems. Firstly, comparing the enrollment rates of different years and distinguishable education stages unveils a turbulent cycle of numbers over five years. While primary enrollment is generally increasing, preprimary enrollment is volatile, and the total enrollment figures also seem different, varying widely from year to year. These results dovetail with previous research on the general imbalances in Pakistan's distribution of education and learning materials and services (Pasha, 2023). These variations in enrollment could be attributed to various issues, including socioeconomic status, government measures put in place, and differences in the quality of teaching facilities and equipment between regional facilities.

Additionally, the descriptive data show that gender disparities exist in enrolment; results depict that the overall mean enrolments for males were higher than for female in all education sectors. There has always been enough evidence of this disparity in the previous literature, in which cultural beliefs, norms and practices, and structural barriers that hinder girl child education have been espoused (Ahmad et al., 2018). This paper lays the facts that show that despite efforts in gender equality in education, challenges such as the provision of stipends as well as gender awareness concerning education, the existence of the gap mentioned above points to a need to address sociocultural and economic barriers that hinder girl child education. Furthermore, analyses using t-tests to compare enrollment based on gender and educational sector are valuable (Sajjad et al., 2022). Key findings from the study show a non-significant relationship in the mean enrollment in favour of either gender or the sector of enrolment between public and private institutions. Even though such results might be expected given the gender differentials in mean enrollment recorded above, they note the multilateral relation that can sometimes occur beyond gender and sector disparities in the ability to access education (Batool & Liu, 2021). Based on these facts and similar previous studies, some implications come up. To be precise, such findings imply that gender gaps in enrolment remain fixed in favour of



the male gender, indicating the need for gender-sensitive policies and strategies to encourage female' access to education.

This resonates with past literature calling for adopting specific measures like gender-sensitive instructional materials development, teacher capacity training and development, and efforts to engage the community to overcome cultural barriers that hinder female' education (Sarwar & Saqib, 2018). The literature review shows that governance structures, financing distributions, and accountability frameworks are the key factors determining educational outcomes (Gul et al., 2021). Fostering and improving such institutional frameworks and systematic provision for an equitable distribution of the facilities can go a long way in redressing the imbalance in enrollment and promoting educational intake amongst various demographics. However, the phenomenon observed concerning the mean enrollment in public and private sectors could be more questionable regarding the quality and availability of the education offered at different educational levels (Halai & Durrani, 2021). As much as private schools may be endowed with some benefits in terms of infrastructure and materials compared to public schools, they also tend to increase the segregation of the rich and cause unfairness in education delivery (Murtaza & Hui, 2021). Hence, this study recommends that policy interventions address public education provision to enhance its quality standard and access while controlling private education establishments that add to disparities and poor quality.

## **6** Conclusion

In conclusion, enrollment trends and inequality issues identified in this paper indicate that those multicultural, multi-contextual, and multifaceted forces of sociocultural, economic, and institutional factors shape enrollment in education in Pakistan. These trends reflect simultaneous changes and inconsistencies over the five years in enrollment numbers in the different stages of education, showing that efforts to diagnose the underlying issues causing the variations need to be actualized. Further, the enrollment rates also clearly indicate the gender disparities that still exist in education, which shows the need for addressing gender disparities in educational facilities to provide fair chances for every child, boy or girl, who needs a proper education. The inferential analyses might also present non-significant differences in the mean enrollment in gender and educational sectors; therefore, they raise the quality of pedagogy across various territories. Improving structures of governance approaches toward resource distribution and accountability remains critical to the development of a more progressive education system in the region of Pakistan. On the same note, putting measures in place for improving quality, cost, monitoring, and regulating private educational institutions can contribute to reducing socio-economic inequalities, with a view to availing fair and quality education for all sections of the populace.

## **7 Recommendations**

To support reducing gender disparity in education in Pakistan there are the following practical recommendations; First, lack of Scholarships or money to buy supplies and tuition fees and other incidentals can prevent many girls from attending school, thus providing Scholarships, stipends and free supplies can encourage them to enroll. Second, the use of qualified female teachers for recruiting and deployment; especially for the rural areas, eradicates cases of insecurity and ensures that parents send their girls to school. Another area deserving urgent intervention is enhancing physical facilities in schools by providing secure, gender-friendly sanitation facilities to enhance female access to and safety in schools. Making use of cultural enablers, and awareness creation campaigns on the importance of educating girls also bring change in attitude within the communities and parents. A data tracking system should be set to track the enrollment trends based on gender to change the policies to fight gender base enrollment differences.



## References

- Ahmad, N., Shaheen, N., & Hussain, S. (2024). Gender disparities in universal primary education: An analysis of women's education and policy implications in Pakistan (1947–2017). *European Journal of Education*, e12638.
- Ahmad, R., Mi, H., Keyao, R., Khan, K., & Navid, K. (2018). Ageing and social security system in Pakistan: policy challenges, opportunities, and role of China–Pakistan Economic Corridor (CPEC). *Educational gerontology*, 44(9), 537-550.
- Akram, H., & Yang, Y. (2021). A critical analysis of the weak implementation causes of educational policies in Pakistan. *International Journal of Humanities and Innovation (IJHI)*, 4(1), 25-28.
- Assembly, U. G. (1948). Universal declaration of human rights. UN General Assembly, 302(2), 14-25.
- Bashir, S., Khan, J., Danish, M., & Bashir, W. (2023). Governance and development challenges in Balochistan: A comparative study with other provinces and way forward. *International Journal of Contemporary Issues in Social Sciences.ISSN (E)* 2959-2461 (P) 2959-3808, 2(4), 620-649.
- Batool, S. M., & Liu, Z. (2021). Exploring the relationships between socio-economic indicators and student enrollment in higher education institutions of Pakistan. *Plos one*, *16*(12), e0261577.
- Batool, S. M., & Liu, Z. (2021). Exploring the relationships between socio-economic indicators and student enrollment in higher education institutions of Pakistan. *Plos one*, *16*(12), e0261577.
- Beyer, A. (2021). Introduction to t-tests. Introduction to Statistics for Psychology.
- Bizenjo, S. (2020). Education in Pakistan: Are low-cost private schools closing the gender gap? *International Journal of Educational Development*, p. 77, 102209.
- Gul, S., Zeb, A., Ullah, O., & Mingyan, G. (2021). Impact of foreign remittances on school enrolment and educational expenditures in district Peshawar, Pakistan. *Liberal Arts and Social Sciences International Journal (LASSIJ)*, 5(2), 209-221.
- Halai, A., & Durrani, N. (2021). School education system in Pakistan: Expansion, access, and equity. In *Handbook of education systems in South Asia* (pp. 665-693). Singapore: Springer Singapore.
- Haseeb, B., & Habiba, M. (2023). Current status of Women in Pakistan—A case study in the light of students, professors, and doctors. *AL-QAWARIR*, 4(4), 14-29.
- Javed, K., & Awan, M. S. (2020). Spatial and Gender Based Comparison of Multidimensional Poverty: Household Level Analysis from Pakistan. *European Online Journal of Natural and Social Sciences*, 9(1), pp-121.
- Khalid, M. W., Samargandi, N., Shah, A. H., & Almandeel, S. (2020). Socio-economic factors and women's empowerment: evidence from Punjab, Pakistan. *International Economic Journal*, *34*(1), 144-168.
- Kumatongo, B., & Muzata, K. K. (2021). Research paradigms and designs with their application in education. *Journal of Lexicography and Terminology (Online ISSN 2664-0899. Print ISSN 2517-9306).*, *5*(1), 16-32.
- Muhammad, Y., & Brett, P. (2019). Addressing social justice and cultural identity in Pakistani education: A qualitative content analysis of curriculum policy. *Education, ethnicity, and equity in multilingual Asia*, 235-253.
- Murtaza, K. G., & Hui, L. (2021). Higher education in Pakistan: challenges, opportunities, suggestions. *Education Quarterly Reviews*, 4(2).
- Pasha, H. K. (2023). Gender Differences in Education: Are Female Neglected in Pakistani Society? *Journal of the Knowledge Economy*, pp. 1–46.
- Qadir, A. (2013). Culture and history in the domestication of global higher education trends in Pakistan. In *National Policy-Making* (pp. 147–163). Routledge.
- Rabia, M., Tanveer, F., Gillani, M., Naeem, H., & Akbar, S. (2019). Gender inequality: a case study in Pakistan. *Open Journal of Social Sciences*, 7(03), 369.



- Rind, G., & Malin, J. R. (2024). Achieving Access and Equity in Education: An Analysis of Higher Education Reforms in Pakistan. *Journal of Comparative & International Higher Education*, 16(4).
- Saadat, Z., Alam, S., & Rehman, M. (2022). Review of factors affecting gender disparity in higher education. *Cogent Social Sciences*, 8(1), 2076794.
- Sajjad, M., Munir, H., Kanwal, S., & Naqvi, S. A. A. (2022). Spatial inequalities in education status and its determinants in Pakistan: A district-level modelling in the context of sustainable development Goal-4. *Applied Geography*, 140, 102665.
- Saleemi, S., & Kofol, C. (2022). Women's participation in household decisions and gender equality in children's education: Evidence from rural households in Pakistan. *World Development Perspectives*, p. 25, 100395.
- Singal, N., Sabates, R., Aslam, M., & Saeed, S. (2020). School enrolment and learning outcomes for children with disabilities: findings from a household survey in Pakistan. *International Journal* of Inclusive Education, 24(13), 1410–1430.
- Siraj Bashir, D. W. S., Zafar, H., Murtaza, A., & Naseer, P. (2022). The role and analysis of quality education on the socio-economic development perspective of Balochistan Province of Pakistan. *Journal of Positive School Psychology*, 6(10), 2190-2206.
- Suhag, A. K., & Khan, N. (2020). National educational policies of Pakistan with reference to social justice: A critical analysis. *Global Educational Studies Review*, 3, 166-174.
- Ugwu, C. I., Ekere, J. N., & Onoh, C. (2021). Research paradigms and methodological choices in the research process. *Journal of Applied Information Science and Technology*, *14*(2), 116-124.
- Ul-Haq, J., Ashraf, I., Cheema, A. R., Hye, Q. M. A., & Visas, H. (2023). The relationship between trade liberalization and gender disparity in education: Evidence from Pakistan. *Nurture*, *17*(3), 180–193.
- Ullah, K., Jan, A., Rani, M., Ahmad, M., & Khan, I. U. (2021). Factors affecting the female education in the newly merged district Bajaur of Khyber Pakhtunkhwa, Pakistan. *Palarch's Journal of Archaeology of Egypt/Egyptology*, *18*(4), 3136-3156.
- Zeb, A., Gul, S., Mingyan, G., & Ullah, O. (2021). Assessment of the Socio-economic determinants of school children dropouts in rural areas of district Peshawar, Pakistan. *Liberal Arts and Social Sciences International Journal (LASSIJ)*, 5(2).
- Zubair, S., & Saeed, A. (2019). Making Sense Of Public-Private Partnership: A Case of Punjab Education Foundation. *Journal of Public Value and Administration Insights (JPVAI)*, 2(4), 6-13.