Intersectionality: The Impact of Gender and Regional Disparities on Educational Equity

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Abstract: This paper explores the impact of gender and regional differences on educational equity, focusing on the intertwining nature of these two factors in creating unequal educational opportunities. Equity in education is a central issue in global education policy, with the objective of ensuring that all children have equal access to education. However, gender inequality and regional differences remain major obstacles to achieving equity in education. In developing countries and poor regions, the interplay of gender discrimination and regional disparities further exacerbates the inequitable distribution of educational resources, leading to numerous children lacking access to comparable educational opportunities as their peers. This paper employs a case study approach to examine the impact of gender on educational opportunities, course selection, and the influence of regional differences on education. Specifically, it utilizes the case of Bihar, India, to explore how gender and region interact to influence educational opportunities for rural girls. Despite the introduction of numerous policies aimed at promoting female education by the Indian government, traditional views on gender roles and social expectations, including early marriage and familial responsibilities, remain deeply entrenched, thereby impeding the educational prospects of girls.

Keywords: Education Equity, Gender, Region, Intersectionality

1. Introduction

Education equity remains a central focus in global education policy, emphasizing the importance of providing all children with equal access to quality education. The term 'equity' in this context signifies that while all students are entitled to equal educational outcomes, these outcomes are not contingent on their personal backgrounds or economic and social circumstances, and it is important to note that students are unable to exercise control over these external factors [1]. While equity is widely recognized as a goal, many challenges remain in achieving it, particularly due to the intersecting effects of gender inequality and regional differences.

In some regions, gender and regional differences work together to lead to significant inequalities in the distribution of educational resources and the quality of education. Gender discrimination often leads to girls being deprived of educational opportunities, while regional differences prevent students in poor areas from obtaining adequate educational resources, further exacerbating educational inequality. In particular, the intersection effects of gender and region often result in specific groups, especially girls in rural areas, facing double inequities.

This study will explore how gender inequality and regional differences intersect to influence the achievement of educational equity. Through the analysis of relevant case, this paper will explore in depth how gender limits educational opportunities, how regional differences affect the allocation of educational resources and the quality of education, and further explore the unique challenges of gender and regional differences. The core questions of the study include: How does gender inequality affect educational opportunities? How do regional differences affect the distribution of educational resources and the quality of education? What are the challenges posed by gender and regional intersection to equitable practices in education?

2. Gender equity in education

Sahin [2] mentioned that the concept of gender equality, or more precisely, equality in education, signifies that both men and women are endowed with equal opportunities for economic, social, cultural, and political development. How does gender inequality affect educational opportunities? This section addresses two key aspects: cultural influences and gendered course selection.

2.1. Cultural influences on gender and education

Cultural factors have been shown to have a significant impact on the educational opportunities of women, particularly in balancing personal goals with familial responsibilities. In many cultures, the expectation of childbearing and household duties places additional burdens on women, often resulting in their withdrawal from education. The pressure of bearing children adds further stress to women's educational and life trajectories, creating a challenging path for both education and personal growth [3]. In many cultures, once women reach the age for marriage, pregnancy often becomes inevitable, forcing them to choose between family life and their educational or career aspirations. For example, one of the root causes of gender discrimination in education is the influence of traditional culture, especially in China. In China's past agrarian society, boys were often seen as stronger and more capable of helping their families create greater economic benefits. Because of their higher earning potential, men have long been preferred over daughters in China, particularly in agrarian societies where strength-based occupations like hunting, animal husbandry, and plowing are important sources of money [4]. With the gradual emergence of educational opportunities, older people tend to direct their expectations and opportunities toward men because they believe that men are better suited to earn a living and achieve success. These cultural beliefs and gender stereotypes have the capacity to influence not only the role of women in society, but also the education system, with the result that they penetrate further into the latter and have a significant impact on students' course choices.

2.2. Gender stereotypes in education

The influence of gender stereotypes on course selection is a prevalent issue, with students often internalizing societal expectations regarding subject choices based on their gender. This phenomenon often results in students relinquishing their personal interests and conforming to the perceived "norms" of academic capabilities associated with their gender. It is a commonly held belief that male children tend to demonstrate superior aptitude in mathematics, spatial reasoning, and non-verbal tasks, while female children are considered to exhibit greater proficiency in verbal reasoning and written communication [5].

According to some research, it does not seem to support this stereotype. There has been debate about the extent to which gender disparities in numeracy and literacy can be attributed to innate biological factors or to the influence of environmental and social factors in the individual's upbringing [6]. For example, Klainin et al. [7] found that girls outperformed boys in high school chemistry and physics in Thailand. However, it should be cautious with this research finding as such finding may

be related to Thailand's educational culture or social structure. Despite the existence of gender stereotypes, gender still plays a role in academic performance. One key factor is math self-efficacy, which refers to an individual's confidence in their math abilities. Cheryan et al. [6] noted that although girls are on par with boys in math ability, they often lack sufficient confidence, affecting their performance.

2.3. Gender equality policies from a global perspective

Gender equality has been a central issue in global education policies, with many countries emphasizing its importance. However, the policies and measures implemented by different countries vary, which provides us with a diverse perspective to understand the complexity of gender inequality. For example, in higher education, the Nordic nations have been described as "global leaders" in the adoption of gender equality policy [8]. Following the Jomtien Conference in 1990, significant government initiatives, such as the District Primary Education Programme in India and the Female Secondary Stipend Programme in Bangladesh, commenced, thereby signifying a noteworthy advancement in the consideration of gender equality in education [9] According to Berggren [10], the evolution of the social insurance system in Sweden has had a significant impact on women's access to higher education, thereby creating opportunities for them to pursue academic careers.

Cultural traditions have been identified as a key factor in the limitation of women's educational opportunities, particularly in the context of balancing family responsibilities and personal aspirations. The selection of subjects in which gender stereotypes prevail has been demonstrated to further exacerbate gender inequality, particularly in the domain of mathematics. Furthermore, while educational policies around the world have made some progress in gender equality, policy differences between different countries still reflect the complexity of gender inequality. In particular, the policy practices of Nordic countries and some Asian countries have demonstrated the different paths and effects of promoting gender equality education.

3. Regional disparities in education

The educational inequity caused by regional differences is also a thorny issue facing modern society. In underprivileged regions or countries, students frequently encounter systemic barriers that impede their access to quality education. Regional imbalances are a universal phenomenon, especially in economically underdeveloped and middle-income countries [11]. These barriers hinder individual's academic success and restrict their potential for social and economic advancement. This kind of educational inequity is mainly reflected in the backward education resources, the shortage of teacher resources and the poor school infrastructure.

3.1. Disparity of digital resources in regions

In rural areas, the limited availability of digital technologies, such as electronic devices and the internet, constitutes a substantial impediment to educational development. Students in these regions frequently lack access to contemporary, technology-driven learning resources, while their urban peers benefit from the integration of digital platforms into their educational curricula, thereby exacerbating the existing disparity in academic prospects. This digital divide serves to amplify pre-existing disparities in education. Research has demonstrated that the integration of digital technologies can significantly enhance academic performance, particularly among students in less developed regions [12]. As Daniele [13] emphasized, districts with higher poverty rates tend to have a larger proportion of students who underperform academically. Indicating that poverty further intensifies the impact of limited access to technology on students' achievement levels.

3.2. Disparities of teacher resources in regions

In addition, the lack of resources and poor income conditions often deter teachers from working in remote regions. In today's era of significant economic growth, there is a growing trend of higher income expectations among the general population. Wiggan et al. [14] argue that, from a sociological perspective, labor is often viewed as a purely economic principle, with professions like teaching not directly linked to market forces. As a result, teaching is generally accorded lower status in society. In many advanced regions, a shortage of common teachers is already a pressing issue, and this challenge becomes even more pronounced in rural and underdeveloped areas. Recruiting competent educators for these regions is particularly difficult. Local officials have also pointed out that another contributing factor to the teacher shortage in rural areas is the presence of ineffective teachers in village-level schools, especially in remote counties [15]. This combination of economic disincentives and the lack of teacher quality further exacerbates the educational disparities between urban and rural areas.

Even though there are challenges, educational technology has the potential to help make education more equal, especially in remote areas. Yang et al. [16] claim that the information and communication technology (ICT) mitigating techniques in China have mostly been meant to maximize the resources at hand to raise the quality of education for underprivileged rural children. Anderson [17] points out that the School of the Air was initiated in Queensland in 1960 with the objective of providing educational instruction to students in remote areas via high-frequency radio transmission, which initiative proved to be a success, continuing to operate effectively into the 1960s and 1970s. Recently, the concept of the Remote Synchronous Classroom (RSC) has emerged, where geographically distant classrooms are connected via ICT to deliver concurrent lessons, ensuring access to educational content in areas with teacher shortages, especially in subjects such as arts, music, and English [16]. These efforts show how technology can help bridge the gaps in education between different regions, making sure that everyone has access to good teaching, even in areas where there might not be as much support.

It is evident that regional disparities in education present significant barriers to educational equity, particularly in rural and underprivileged areas. The lack of digital technology and qualified teachers exacerbates the educational divide between urban and rural regions, limiting opportunities for academic success and future advancement. However, the strategic use of educational technologies holds great promise in bridging these gaps and ensuring equitable access to quality education. The strategic implementation of ICT solutions, such as the Remote Synchronous Classroom, along with other digital initiatives, has the potential to mitigate the impact of regional disparities and foster greater educational inclusivity for all students, irrespective of their geographical location.

4. Intersectionality of gender and region: a case of rural girls in Bihar

As Evans-Winters [18] pointed that the term 'intersectionality 'is being used with increasingly great frequency in educational scholarship and discussion. Intersectionality is a concept that focuses on how people with diverse identities are discriminated against [19]. That is a framework and analytical model that is used to explain the interaction and relationship between race, class, gender and other social categories, and the influence that this has on the beliefs and personal experiences of individuals and groups [18]. In Bihar, the interaction between gender and region exerts a substantial influence on the educational opportunities available to girls. Culture exerts a particularly marked effect on educational outcomes, with prevailing gender role expectations and familial responsibilities frequently resulting in the exclusion of rural girls from the educational system. This cultural perception of gender is not only entrenched within the family unit but is also deeply embedded within social structures and identities, thereby further constraining girls' access to educational opportunities.

In Bihar, the intersection of gender and regional disparities creates significant barriers to education for girls. The combined effects of deeply ingrained gender norms and economic disadvantages in these areas result in girls being disproportionately excluded from educational opportunities, with their education often being deprioritized in favor of domestic roles. The greatest educational challenge encountered by females, particularly girls from rural regions, is that, while they may be enrolled at the start of the year, they do not necessarily stay in school since girls are frequently taken out of school to share household obligations [20]. The influence of social and cultural traditions on educational opportunities for these girls is significant, with many families assigning the primary responsibility for girls' education to family care and domestic work rather than to education itself.

For example, many rural girls in the region are denied secondary education because of gender and regional differences. Although the Indian government has introduced many policies to encourage women's participation in education, traditional views of gender roles and social expectations of early marriage and family responsibilities remain deeply rooted. Ruthven et al. [21] point out that in Bihar, girls are often educated not just for personal development, but for the social requirements of marriage. The educational goals of these girls are largely to enable them to make a smooth transition to married life, rather than to prepare them for independence or a career. Such cultural expectations often lead girls to withdraw from school after completing primary education and enter marriage and family roles.

Sahoo [22] recalls that three hundred years ago, female education in India was almost limited to a small number of upper class and upper caste girls, who were usually only educated in the family and the pervasive stigma surrounding female literacy meant that opportunities for many girls were limited. Even today, India has made some progress in promoting female education, the intertwining influence of gender and region remains a major constraint on girls' access to education. Particularly in rural areas, people often perceive girls as not requiring further education, as their primary roles are as wives and mothers.

In areas such as Bihar, socio-cultural and economic barriers make education more unequal for girls. Families often choose to educate boys first, believing that girls' education is less important than that of boys. In poor areas, the economic pressure on families also makes them more likely to get girls married as soon as possible rather than continue their education. Shah [23] points out that despite many efforts at the national level, gender inequality remains widespread in Indian society, especially in some poor rural areas, where gender and regional challenges make it more difficult for girls to enjoy equitable educational opportunities.

It is evident that the intersection of gender and region exerts a significant influence on the educational prospects of rural girls, giving rise to a more intricate landscape of educational inequalities. In these regions, the interplay between gender discrimination and regional poverty serves to compound the obstacles confronting girls, underscoring the imperative for the implementation of targeted policies and social transformations that are requisite for the dismantling of these barriers.

5. Conclusion

This paper emphasizes that equity in education is not only an issue involving gender equality, but also involves the profound impact of regional differences, with the interweaving of gender and region affecting rural girls, especially in areas such as Bihar, India, where they face multiple pressures of cultural, economic, and social expectations, leading to more limited educational opportunities. The interaction of gender discrimination and regional poverty severely limits the educational opportunities of rural girls. To address this issue, there is an urgent need to implement more targeted policies and social changes to reduce inequalities caused by gender and regional differences, for example, educational grants and scholarships, teacher training and district grants, family and society work together to break down decadent stereotypes.

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Education policies must recognize this intersectionality and adopt comprehensive measures to provide equal educational opportunities for all children, especially for groups with gender and regional disadvantages. Nevertheless, this will result in increased financial and capital pressures for the government and the country. Moreover, it is important to note that long-standing social and cultural factors, as well as people's stereotypes, are challenging to alter rapidly. This process necessitates the involvement of all personnel, thereby introducing an additional layer of complexity.

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