

Exploring Gender Disparities in Education: Implications for Policy and Practice

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Abstract. This literature review critically examines relevant literature on gender disparities in educational contexts, with a particular focus on factors contributing to gender imbalances in student applications and enrollment figures. By analyzing studies and expert insights from Jennie Weiner, Azza Karam, and findings from a Yale study on teachers' perceptions, this review aims to uncover the underlying mechanisms of gender bias and propose informed strategies to foster a more gender-inclusive educational environment.

Keywords: Gender, math, education.

1. Introduction

Gender disparities in education represent a critical barrier to achieving equity and quality in learning environments worldwide. Despite progress in some areas, significant gaps persist in access, retention, and achievement between male and female students, as well as in the representation of women in leadership positions within educational institutions. These disparities are influenced by a complex interplay of societal norms, institutional policies, and individual biases. The skewed male-to-female ratio of approximately 2:1 in our educational setting is a manifestation of such broader gender inequities and warrants a deeper examination of its root causes and impacts.

This literature review aims to critically analyze and discuss relevant literature on gender disparities within educational contexts, particularly focusing on factors contributing to gender imbalances in student applications and enrollment figures. By examining studies and insights from experts like Jennie Weiner, Azza Karam, and findings from a Yale study on teachers' perceptions, this review seeks to uncover underlying mechanisms of gender bias and propose informed strategies for fostering a more gender-inclusive educational environment. Through this exploration, the review will provide a comprehensive understanding of the challenges and opportunities for addressing gender disparities in education, contributing to the ongoing efforts to create equitable learning spaces for all students.

2. Background

The conspicuous gender imbalance in our educational institution, reflected in the 2:1 male-to-female ratio among students, is not just a numerical discrepancy but a symptom of broader societal and educational inequalities. This disparity mirrors global concerns where, despite considerable progress, women and girls often have less access to education, face more barriers to persisting through programs, and are underrepresented in leadership roles within educational spheres. Such imbalances hinder not just the affected individuals but the educational community and society at large, limiting diversity of thought and equality in opportunity.

Gender disparities in education manifest in various forms across different cultures and economies. Globally, UNESCO reports persistent gaps in access to education with considerable regional variations. While some countries have achieved commendable gender parity, others lag, especially in tertiary education where subjects like STEM (Science, Technology, Engineering, and Mathematics) see a pronounced underrepresentation of women. The reasons behind such disparities are multifaceted, including socio-economic factors, cultural norms, and institutional biases. In many instances, these imbalances start early and widen with progression through the educational system, leading to a significant underrepresentation of women in higher academic ranks and leadership roles.

Addressing these imbalances is not merely a matter of fairness but is crucial for educational quality and societal progress. Diverse educational environments, where all genders are equally represented and valued, foster more comprehensive learning experiences, encourage varied intellectual perspectives, and produce graduates who are better equipped to contribute to a diverse and inclusive workforce. Moreover, education is a powerful tool for societal transformation, empowering individuals to break cycles of poverty and challenge ingrained social inequalities. Promoting gender equity in education thus has far-reaching implications, benefiting not only the individuals directly involved but also broader communities and future generations.

In this context, understanding and addressing the factors behind the gender ratio skew in our school is imperative. It involves not just quantitative assessments but also a qualitative understanding of the barriers and biases that contribute to such disparities. This background sets the stage for a detailed exploration of the literature, aiming to glean insights and strategies for fostering a more balanced and inclusive educational environment.

3. Analysis and Discussion

3.1. Gender and Leadership in Education

Jennie Weiner's research underscores the gender disparities prevalent in educational leadership, a field paradoxically dominated by women at the entry level yet led by men at the top. This imbalance is not a mere happenstance but is deeply rooted in the systemic design of educational institutions and societal norms. Weiner argues that the educational sector, highly feminized in terms of workforce, ironically devalues 'women's work', thereby relegating women to lower-status positions and creating an 'inverted pyramid' of leadership. This structure is not solely the reflection of individual biases but is emblematic of broader societal patterns that underappreciated and undervalued professions predominantly occupied by women. Her insights bring to light the need for a critical examination of both the overt and covert ways gender biases are perpetuated within educational leadership (Weiner 2021).

The systemic design of educational institutions inherently embodies societal norms and biases, significantly contributing to gender disparities in leadership. Societal constructs of gender roles often align leadership with traits traditionally viewed as masculine - assertiveness, dominance, and independence, thereby implicitly suggesting that women are less suited for these roles. Such stereotypes permeate hiring practices, promotional paths, and leadership evaluations within educational settings, maintaining and reinforcing the gender gap. The undervaluation of 'women's work' further exacerbates this issue, leading to fewer resources, support, and respect for positions predominantly filled by women, such as teaching. This cycle of undervaluation not only impacts the individuals within these roles but also affects the broader perception and value of the profession itself (Weiner 2021).

In addressing the skewed male-to-female ratio and the broader issue of gender disparities in our school, it is imperative to understand and actively address these leadership disparities. Leadership in educational settings doesn't merely influence the operational or educational outcomes but significantly shapes the school culture, values, and the implicit curriculum that students learn by observing and interacting within the school environment. Promoting gender equity in leadership roles is thus crucial for cultivating a more inclusive and equitable learning environment. It involves actively challenging and reshaping the institutional structures and societal norms that perpetuate gender biases.

Encouraging women in leadership roles not only provides diverse role models for students but also contributes to more diverse decision-making and policy development, reflecting a broader range of perspectives and experiences. It challenges the prevailing stereotypes, inspiring both students and staff to question and redefine traditional gender roles. This shift can lead to more gender-sensitive policies, practices, and curriculums that recognize and address the unique challenges and barriers faced by individuals of all genders.

Moreover, fostering an environment where leadership is reflective of the student body and the wider community can have profound effects on student engagement, achievement, and aspirations. When students see themselves reflected in their leaders, they are more likely to feel understood, valued, and capable of reaching similar positions. This representation can empower students, promote higher self-esteem, and broaden their aspirations. Thus, the commitment to addressing gender disparities in leadership within our school is not only an ethical imperative but a strategic approach to enhancing the educational experience and outcomes for all students (Weiner 2021).

3.2. Education as a Pathway towards Gender Equality

Azza Karam advocates powerfully for education as an essential tool for empowering women and achieving gender equality. She sees education as more than just an academic pursuit; it is a transformative process that equips women with the knowledge, skills, and confidence to break barriers and participate fully in all spheres of life. Education enlightens women about their rights, provides them with the tools for economic independence, and opens up opportunities for leadership and decision-making in political, social, and economic arenas. It is a critical step in shifting power dynamics and dismantling patriarchal structures that have historically marginalized women. Karam's perspective is not just theoretical; it is backed by numerous studies and statistics showing the tangible benefits of educating girls and women (Karam 2014).

Despite the known benefits of education, disparities persist at alarming rates globally. According to UNESCO, millions of girls worldwide are still out of school, and gender disparities widen as students' progress through the education system, particularly in secondary and higher education. These disparities are not merely academic issues; they reflect and reinforce broader patterns of gender inequality. Cultural norms often dictate that girls should prioritize domestic responsibilities over education, leading to early dropouts and limited career opportunities. Economic barriers, such as poverty and lack of resources, further exacerbate the issue, with families often prioritizing boys' education when resources are scarce. Structural barriers, including inadequate school facilities, lack of female teachers, and gender-insensitive curricula, also contribute to the gender gap in education. Addressing these disparities requires a multifaceted approach that tackles cultural, economic, and structural barriers simultaneously (Karam 2014).

The benefits of bridging the gender gap in education extend far beyond the individual level. Educated women are likely to marry later and have fewer, healthier children, directly impacting population growth and health outcomes. They are better equipped to seek and negotiate healthcare, contributing to improved maternal and child health. Economically, women's education is linked to higher earnings and increased productivity. Educated women are more likely to participate in the labor force, have higher incomes, and contribute positively to their communities and economies.

Moreover, education fosters a cycle of positive outcomes across generations. Educated mothers are more likely to invest in their children's education, leading to better health, education, and economic outcomes for the next generation. This intergenerational impact of education contributes to long-term sustainable development and poverty reduction.

Educating girls and women also has a transformative effect on societies. It challenges entrenched social norms and paves the way for greater gender equality in all spheres of life. Educated women are more likely to advocate for their rights and participate in decision-making processes, leading to more inclusive and democratic societies. They serve as role models, inspiring the next generation and contributing to a culture that values and supports education for all.

3.3. Race, Gender, and Teachers' Perceptions of Students' Ability

The Yale study conducted by Grace Kao and Calvin Rashaud Zimmermann uncovers the subtle yet profound ways in which race, ethnicity, and gender influence teachers' perceptions of students' non-cognitive abilities, which in turn affect academic evaluations. The research revealed that even when controlling for actual math and reading abilities, teachers' perceptions varied significantly based on the student's race and gender. For instance, black students were rated lower in math skills

compared to their white peers with similar abilities and test scores. Conversely, Asian students were often seen as more proficient in literacy skills than their similarly situated white counterparts. The study also found nuanced differences in how girls and boys within the same racial or ethnic group were perceived, underscoring the complexity of stereotypes and biases in educational settings. (Kao & Zimmermann 2020).

The biases and stereotypes held by teachers can have profound implications on students. When students are consistently perceived and evaluated through the lens of racial, ethnic, or gender biases, it affects their academic engagement, performance, and aspirations. (Kao & Zimmermann 2020) Over time, these perceptions can influence students' self-concept, potentially leading to internalized stereotypes and affecting their long-term educational and career trajectories. For instance, girls who are subtly discouraged from pursuing math or science due to perceived weaknesses might steer away from these fields, perpetuating gender disparities in STEM careers. Similarly, students of color might internalize lower expectations, affecting their academic confidence and interest (Kao & Zimmermann 2020).

In light of these findings, it's clear that schools, including ours, must take deliberate steps to address and mitigate these biases. This involves comprehensive teacher training focused on recognizing and challenging implicit biases. Educators must be equipped with strategies to ensure that their perceptions and evaluations are fair and based on each student's actual abilities rather than stereotypes.

Additionally, schools should adopt inclusive teaching practices and curriculums that reflect the diversity of the student body and counteract stereotypes. This might include diverse representation in teaching materials, promoting group work those values different perspectives, and creating a classroom environment that celebrates rather than stigmatizes differences.

Finally, it's essential to foster an open dialogue about race, gender, and equity within the school community. This could involve workshops, discussion forums, and other initiatives that encourage students, teachers, and parents to reflect on these issues, share their experiences, and work together to create a more inclusive educational environment.

4. Summary

Addressing gender disparities in education is a complex and multifaceted challenge. By understanding the insights provided by Weiner, Karam, and the Yale study, educators and policymakers can better identify the barriers and biases that contribute to these disparities. Implementing informed strategies can lead to more equitable and inclusive educational environments, benefiting not only the individuals directly affected but society as a whole.

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