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## Gender and education evidence in Kenya

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# GENDER AND EDUCATION EVIDENCE IN KENYA

# **Key Takeaways**

- To improve enrollment and access to education, focus efforts on reducing financial barriers to school and addressing barriers such as inadequate school access and school materials.
- Gaps in the literature remain for barriers that undermine gender equity, including insufficient support for girls' education; limited information on returns to education and alternative roles for women; child marriage and adolescent pregnancy; gender-insensitive school environments; inadequate health and childcare services for girls; and inadequate menstrual health management (MHM). These barriers require further research exploration and investment.
- Effective interventions to improve the quality of education include addressing insufficient academic support through interventions such as after-school remedial education and individual tutoring. However, there is limited evidence exploring the effectiveness of interventions aiming to address insufficient teaching materials and supplies, as well as inadequate sports programs on education quality.
- There is limited evidence on interventions addressing barriers related to safety, security, and genderbased violence (GBV) and their effects on education outcomes, particularly in regard to school-related gender-based violence (SRGBV).
- Gaps in the literature remain for barriers related to the two remaining policy themes of nurturing and mentoring, and governance and management. In the case of the former, studies on interventions addressing the barrier of inadequate life skills provide mixed results. As for governance and management, studies related to poor policy/legal environment show that more research is needed on policies not related to school construction or tuition elimination.

As part of a four-brief series exploring the Kenyan gender and education landscape, this brief presents findings from a recent literature review of programs designed to address gender-related barriers to schooling for girls in East Africa. This summary highlights effective and promising approaches to addressing these barriers and offers cross-cutting recommendations for programs and policies in Kenya.

#### Background/barriers to girls' education

Despite great strides in recent years to improve primary enrollment and attainment for girls in low- and middle-income countries (LMICs), gender disparities in education persist, undermining girls' opportunities. According to the 2023 Global Education Monitoring report, gender parity in enrollment has not been achieved at any level of

education in Sub-Saharan Africa and only 88 young women complete upper secondary school for every 100 young men (UNESCO 2023). Despite the large body of global evidence on education, important knowledge gaps remain regarding the effectiveness of interventions to reduce gender-related barriers to schooling on girls' education outcomes.

To address this gap, the Population Council published a global systematic review summarizing evidence from 82 experimental and quasi-experimental studies from LMICs. The review assessed which programs may help to improve education outcomes for girls, specifically attainment, enrollment, absenteeism, and academic performance. From this review, 18 gender-related barriers were identified. Included studies used rigorous research methods to provide causal estimates of the impact of interventions, including randomized controlled trials (RCTs), regression discontinuity design (RDD), instrumental variables analysis, and other quasiexperimental techniques. Additionally, studies were included only if they examined interventions that attempted to remove or minimize one or more of the identified gender-related barriers to education and reported education outcomes specifically for girls and/or disaggregated results by sex (Psaki et al. 2022).

The review found interventions that address financial barriers to schooling and those that address insufficient academic support may be effective at improving education outcomes for girls. Promising interventions include efforts to enhance girls' access to schooling and school materials, as well as improvements in water and sanitation within schools, particularly by ensuring the availability of toilets. Evidence was limited or inconclusive on the effectiveness of interventions that address other gender-related barriers such as SRGBV, sports programs for girls, child marriage and adolescent pregnancy, and others. While bodies of evidence generally exist for these barriers, few studies looked at the relationship between interventions for these barriers and education outcomes specifically (Psaki et al. 2022).

To explore how the results of the global review apply to Kenya and East Africa generally, the Population Council reviewed and synthesized 35 additional studies published between 2020 and 2022, evaluating education programs in nine East African countries. Both peer-reviewed journal articles and grey literature were included. The remainder of the brief highlights findings on what works to address gender-related barriers to schooling in East Africa and provide recommendations for how programs and policies can address gender-related barriers to girls' schooling in Kenya.

# What Works to Improve Girls' Education Outcomes in East Africa?

#### **Effective Interventions**

The global systematic review found that effective interventions exist to address three, gender-related barriers to girls' schooling: inability to afford tuition and fees, inadequate food, and insufficient academic support. Examples of these interventions include free primary education policies and tuition and/or school fee waivers; on-site school feeding, take-home rations, and per-student payments to local caterers for meals; and training and remedial support, many of which also integrate technology.

Among these barriers, the strongest alignment between the East African literature and the global literature was related to the inability to afford tuition and fees. We identified an additional eight studies conducted in Burundi, Ethiopia, Malawi, Tanzania, and Uganda, that examine the effects of interventions designed to address this barrier. All eight studies found significant, positive impacts on enrollment and attainment outcomes, aligning with the global literature, and indicating that these approaches may also be effective in East African contexts. The four studies that examined academic skills, such as literacy, also found positive impacts. Examples of the interventions detailed in these studies were tuition/fee waivers paid to schools (e.g., Barrera-Osorio et al. 2020), as well as policies eliminating school fees (e.g., Wild and Stadelmann 2020; Zenebe Gebre 2020).

We also identified six recently published studies examining the impact of programs addressing insufficient academic support on girls' education outcomes in East Africa. These studies were conducted in Ethiopia, Malawi, Rwanda, Uganda, and Zimbabwe. The interventions examined in these studies conceptualize academic support in a variety of ways, including providing teacher training support to improve pedagogical practices and teacher effort (e.g., Blimpo and Pugatch 2020), implementing the use of digital literacy and numeracy applications (e.g., Levesque et al. 2020), and providing foundational skills support for out-of-school learners (e.g., Britt et al. 2021). We find evidence that programs providing pedagogical support accompanied with materials, such as digital literacy and numeracy







applications and books, are effective at improving learning outcomes for girls. However, similar to the global review, more research is needed to explore the effects of these interventions on school enrollment and attainment.

For the **inadequate food** barrier, only one new study was identified examining the effects of a school-feeding intervention on girls' education outcomes (Hunns et al. 2019). This study, which measured the effects of the School Meals Programme (SMP) in Malawi, found that the program reduced girls' absenteeism but had a minimal effect on literacy. These findings are in alignment with the global systematic review's conclusion that school feeding interventions are effective at improving girls' school attendance—but may not have a substantive effect on learning outcomes.

#### **Promising Interventions**

The global systematic review also found promising evidence for interventions addressing access to school, girls' inability to afford materials, and improving water and sanitation in schools, especially through the provision of toilets. Promising interventions aimed at addressing each of these barriers, respectively, include the provision of bicycles to girls enrolled in school and distance learning; providing school uniforms and scholarships covering school fees and expenses such as books, uniforms, and shoes; and the construction of separate latrines for girls.

Three new studies from Kenya, Uganda, and Zambia were identified looking at interventions addressing inadequate school access in East Africa. Of the three new studies, two examined interventions where the primary component focused on improving school access, either through the construction of school facilities (Wokadala et al. 2019) or increasing the availability of transportation to and from school (Fiala et al. 2022). Both interventions were found to have positive effects on school absenteeism and test scores, aligning with the global literature that efforts to expand access to school are promising approaches to improve education outcomes in East Africa.

However, evidence gaps exist in the reviewed East Africa literature for the other two gender related barriers girls' inability to afford materials and improving water and sanitation in schools. No new studies were identified for interventions addressing the inability to afford school materials, while only one new study was identified examining the effects of a water, sanitation, and hygiene (WASH) intervention on girls' education outcomes. The WASH study, looking at the construction of boreholes in rural Zambia, did not identify a significant effect on girls' school attendance (Shimamura et al. 2022). Despite the promising evidence on interventions addressing these two barriers, more research is needed to draw conclusions about the circumstances in which WASH interventions and efforts to improve access to school materials improve education outcomes for girls in East Africa.

#### More Research Needed

For the remaining gender-related barriers to schooling, evidence gaps exist in the global literature. For some barriers, there are simply too few studies examining the pathways between barrier interventions and education outcomes to make clear conclusions. These interventions include those addressing insufficient support for girls' education (e.g., mobilizing community support for girls' schooling and/or motivating parents to keep girls in school); child marriage and adolescent pregnancy (e.g., programs to increase girls' agency); SRGBV; limited safe spaces and social connections (e.g., "safe" or protected spaces facilitated by female mentors, often paired with a life skills curriculum); insufficient teaching materials and supplies (e.g., the provision of curricula); inadequate sports programs for girls (e.g., providing equal access to sports facilities for girls); inadequate health and childcare services (e.g., providing onsite childcare to girl students); and inadequate MHM (e.g., providing free or subsidized sanitary products).

Other barriers examined in the review had mixed results and more research is needed to understand the effects of interventions on girls' education outcomes. These include limited information on returns to education/ alternative roles for women (e.g., providing information on paid employment for educated girls); gender-insensitive school environment (e.g., training teachers in gender-responsive pedagogy); inadequate life skills (e.g.,







sexuality and HIV education); and poor policy/legal environment (e.g., policies not related to school construction or fee elimination, such as the introduction of mother tongue instruction).

The review of the East Africa literature found similar evidence gaps as the global review for the barriers mentioned above. In many cases, studies that examine multicomponent programs are not designed to test the effects of each individual component. This challenge was common among studies that explored interventions aiming to address the following barriers: insufficient support for girls' education, child marriage and adolescent pregnancy, insufficient teaching materials and supplies, gender-insensitive school environment, inadequate life skills, and poor policy/legal **environment.** For example, nine new studies were identified in East Africa that examine the impact of programs addressing inadequate life skills on girls' education outcomes. However, most of the interventions discussed were multicomponent programs that paired life skills education with additional components such as cash transfers (e.g., Palermo et al. 2021), increased access to health services (e.g., Austrian et al. 2020), and learning materials (e.g., Sabates et al. 2020), making it difficult to isolate the direct effects of the life skills education activities within these programs.

In the case of the remaining barriers, too few studies were found in the recent East Africa literature for the following barriers: SRGBV, limited safe spaces and social connections, inadequate sports programs for girls, inadequate health and childcare services, inadequate MHM, limited information on returns to education/ alternative roles for women. This highlights the need for more research to understand the most effective interventions to address these barriers.

#### Recommendations

- 1. Address financial barriers to schooling:
  Policies and programs should focus on reducing financial barriers to schooling such as school fees and tuition, as these interventions have been shown to have a significant positive impact on girls' enrollment and attainment. Examples of such interventions include tuition/fee waivers paid to schools, policies eliminating school fees, and cash transfers to families.
- Programs that provide pedagogical support along with materials, such as digital literacy and numeracy applications, and books, can be implemented to improve learning outcomes for girls. This should include teacher training support to improve pedagogical practices and teacher effort.
- 3. Evaluate the effectiveness of interventions: Policymakers and researchers should monitor the effectiveness of interventions through rigorous evaluation to understand whether interventions are having the intended impact on girls' education outcomes.
- 4. Address remaining knowledge gaps:

  More research is needed to determine what works to address other gender-related barriers to schooling, such as school-related gender-based violence, sports programs for girls, child marriage and adolescent pregnancy, and others. Policymakers should prioritize funding for research in these areas to fill the knowledge gap and improve education outcomes for girls.







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# Barrier summary table

The table below lists the 18 gender-related barriers to education identified in the global systematic review that were used to guide this review. Each barrier was categorized into one of six policy priority areas identified by the Kenyan Ministry of Education.

Barrier	Access	Equity	Quality	Safety, Security, and Gender-Based Violence	Nurturing and Mentoring	Governance and Management
Insufficient support for girls' education		•				
Child marriage and adolescent pregnancy		•				
Limited information on returns to education/alternative roles for women		•				
School-related gender-based violence (SRGBV)				•		
Gender insensitive school environment		•				
Limited safe spaces and social connections				•		
Insufficient teaching materials and supplies			•			
Insufficient academic support			•			
Inadequate sports programs			•			
Inadequate health and childcare services for girls		•				
Inadequate life skills					•	
Inadequate menstrual hygiene management (MHM)		•				
Inadequate Water and Sanitation	•					
Inadequate school access	•					
Poor policy/legal environment						•
Inability to afford tuition/fees	•					
Inability to afford school materials	•					
Inadequate food	•					







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