
Title registration form: Policies and interventions to remove gender-related barriers to girls' school participation and learning in low- and middle-income countries: a systematic review of the evidence

Barbara Mensch, Stephanie Psaki, Nicole Haberland, Erica Chuang, Meredith Kozak

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Title of the review

Policies and interventions to remove gender-related barriers to girls' school participation and learning in low- and middle-income countries: a systematic review of the evidence

Background

Low- and middle-income countries have made enormous progress in expanding primary school enrolment since the 1990s. Yet questions remain about the causes and consequences of continued gender gaps in school enrolment, progression, skill acquisition and school quality, as well as the best approaches to promoting broader outcomes like ambition, agency, cognitive ability, and critical thinking skills. A recent analysis of trends in gender equality in education using Demographic and Health Survey (DHS) data revealed that, in many low- and middle-income countries:

- Progress in girls' educational attainment has stagnated;
- Female disadvantages persist in access to school, although once enrolled, girls tend to complete as many grades as boys;
- Gender parity in attainment may mask gender-specific barriers to retention such as unplanned pregnancy for girls and work pressures for boys; and
- Gender parity in attainment does not necessarily translate into gender parity in learning (Psaki, McCarthy, & Mensch, 2018).

Despite widespread agreement on the importance of education for girls, important barriers remain to ensuring that girls enter school on time, complete at least a secondary education, and gain basic literacy and numeracy skills. In some settings, the school environment may be detrimental with teachers reported to have negative attitudes towards girls and low expectations of their academic ability, potentially undermining girls' achievement (Lloyd & Mensch, 1999). Evidence has also emerged of sexual, physical and psychological abuse of girls at school (DevTech, 2004; EFA Global Monitoring Report, UNESCO, & UNGEI, 2015; Leach, Dunne, & Salvi, 2014; Leach, Fiscian, Kadzamira, Lemani, & Machakanja, 2003). In addition, compared to their male peers, girls are considerably more likely to experience early marriage and childbearing, with consequences for school continuation. Policies barring adolescent mothers and pregnant girls from school are also likely to contribute to gender differences in educational attainment (Gender Education Monitoring Report Gender Review 2018). Finally, when financial resources are limited, parents with traditional gender role attitudes may prefer to keep sons in school rather than daughters (Lloyd, 2009).

Policy relevance

Sustainable Development Goal (SDG) 4, adopted as part of a broader global development agenda in 2015, focuses on expanding access to quality education and lifelong learning, including by eliminating gender disparities in schooling (target 4) by 2030. This renewed

agenda builds on previous global commitments, such as the Millennium Development Goals, which pledged to achieve education for all children by 2015. However, while the vast majority (96%) of the world's countries are signatories to the 1979 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), 27 have entered reservations pertaining to gender equality in education (Gender Education Monitoring Report Gender Review, 2018). Further, despite numerous global policy commitments, there exist countries with policies preventing girls from completing their schooling. For example, as of June 2018, Tanzania, Sierra Leone, and Equatorial Guinea have maintained bans on girls who are pregnant or have already given birth from attending government-run schools (Human Rights Watch, 2018).

Though gender inequalities in education in many LMICs persist, examples exist of policies aimed directly at addressing girl-specific barriers to education in these settings. For example, Uganda passed legislation in the last decade updating curricula in early childhood and primary schools to be more gender sensitive (Nabbuye, 2018). The Philippines implemented the Anti-Bullying Act in 2013 to curb school-related violence, specifically referencing and condemning bullying based on gender (UNESCO, 2015). In addition, the Female Secondary School Stipend Programme in Bangladesh and the Bourses Maman programme in Mali are both nationally-implemented conditional cash transfer programs that address financial obstacles that inhibit household investment in girls' schooling (Gender Education Monitoring Report Gender Review, 2018).

Objectives

The primary objective of this systematic review is to identify, appraise and synthesize evidence from evaluations of policies and interventions to address gender-related barriers that are believed to undermine girls' school participation and learning.

We define gender-related barriers as factors that prevent girls from enrolling, attending, fully participating and/or learning in school. Barriers may exist at the individual, household, community, school, or policy/systems levels. Drawing on the work of UNICEF, UNESCO, the Global Partnership for Education and the United Nations Girls' Education Initiative on barriers to girls' education, specifically (Albright, 2016; Antoninis et al., 2018; "Barriers to Girls' Education: Strategies and Interventions," 2002; Secretariat, 2016), Figure 1 provides examples of "gender-related" and "non-gender-related" barriers at each level.

Note that this is not a comprehensive list of potential barriers. Also, all barriers listed as "non-gender-related" may in fact be gender-related in contexts where the experience or effects of these barriers differ for girls and boys. For example, the costs of schooling may have a differentially negative effect on girls' enrolment and attainment when parents prioritize education for boys over girls, a reflection of attitudes about the value of girls' education.

	<i>Gender-related barriers to schooling for girls</i>	<i>Non-gender-related barriers to schooling for girls*</i>
<i>Individual, household and community-level barriers</i>	<ol style="list-style-type: none"> 1. Direct costs (e.g. school fees)* 2. Opportunity costs (e.g. housework) 3. Attitudes and practices (e.g. beliefs about value of girls' education) 4. Sexual and reproductive health-related issues (e.g. adolescent pregnancy/marriage) 5. Safety and violence (e.g. distance to school) 	<ol style="list-style-type: none"> 1. Other health-related issues (e.g. malnutrition) 2. Other safety concerns (e.g. landmines/conflict zones) 3. Conflict and instability (e.g. children separated from families)
<i>School-level barriers</i>	<ol style="list-style-type: none"> 1. Facilities (e.g. lack of water/sanitation) 2. Curriculum (e.g. gender-biased content) 3. Learning processes (e.g. teacher bias) 4. Sexual harassment/misconduct 	<ol style="list-style-type: none"> 1. Poor quality environment (e.g. overcrowded classrooms) 2. Poor quality content (e.g. inadequate learning materials) 3. Poor quality learning processes (e.g. weak school management) 4. Conflict and instability (e.g. damage to school infrastructure)
<i>Policy and system-level barriers</i>	<ol style="list-style-type: none"> 1. Discriminatory policies (e.g. pregnant girls forced to leave school) 	<ol style="list-style-type: none"> 1. Lack of political support (e.g. insufficient budgetary resources for education) 2. Inadequate legal framework (e.g. laws on compulsory education) 3. Curriculum outdated (e.g. no content on use of technology) 4. Insufficient teacher training processes

Adapted from "Barriers to Girls' Education: Strategies and Interventions," UNICEF 2002.

Figure 1. Examples of gender-related and non-gender-related barriers to girls' education. The shaded area shows the types of barriers to schooling that are of interest in this review.

The specific research question we will address is:

- What is the effect of interventions to eliminate gender-related barriers to girls' education on girls' school participation and learning outcomes?

Existing reviews

A considerable number of reviews, many systematic, have been conducted that assess the evidence regarding the effectiveness of interventions to improve education outcomes in developing countries. To date, the most comprehensive review has been conducted by the International Initiative for Impact Evaluation (3ie), which published a systematic review and meta-analysis entitled, "Interventions for improving learning outcomes and access to education in low- and middle-income countries" in 2015 (Snilstveit et al., 2015), along with an evidence gap map highlighting 21 previous or ongoing systematic reviews in education. In summarizing the findings, the authors noted that programs either improve school participation or learning but rarely impact both. "Strong and consistent evidence" was found for cash transfer programs in affecting participation and "structured pedagogy programs," defined as "evidence-based curricula and instructional approaches" for affecting learning.

For the most part, the interventions analyzed did not specifically target girls and disaggregation by sex was either not a component of the reviews or, when included, was not a focus of the analysis. Only when analyzing interventions specifically targeting girls e.g.

conditional cash transfers and sex segregated toilets (see, for example Ganimian and Murnane 2014) were analyses focused on girls. This reflects the fact that most education evaluations do not examine heterogeneity in effects by sex (noteworthy exceptions are Duflo, Dupas, & Kremer, 2011; and Lucas, McEwan and Ngware 2014).

Several reviews focusing explicitly on girls' education have been conducted recently, most notably the 2014 study by Unterhalter (2014) and the review by Sperling and Winthrop (2015). While valuable contributions to the body of evidence on what works in girls' education, compared to the general education reviews (e.g. by 3ie), reviews on girls' education have tended to be less systematic in their search strategy, used less rigorous criteria for ratings of study quality or inclusion, and have not provided quantitative syntheses of effects of different approaches. Although these reviews have considered how programs may affect girls and boys differently — an analysis that has been largely lacking in the more general education reviews — they have also tended to focus on addressing school-level barriers, overlooking girls who have never attended school or dropped out prematurely.

In order to identify programs most effective for girls' access and learning, the World Bank is currently conducting a secondary analysis of a 3ie database containing existing systematic review data in addition to other studies in their own database, with the goal of comparing interventions aimed at girls with general interventions; sex-disaggregated data have been requested from authors in order to complete the analyses (Evans & Yuan, 2018). The analysis focuses on two outcomes for girls, access and learning, and attempts to answer the question of which approach — girl-targeted or those including both girls and boys — is more effective.

This review departs from those that already exist in that we aim to identify if, and to what extent, policies and interventions designed to address gender-related barriers to girls' school participation and learning are effective in enrolling girls in schools, retaining them as students, ensuring quality learning, and helping prepare them for the transition to work and healthy adulthoods. The contribution of this systematic review is to bridge the gap between the most rigorous reviews, and those that use a gender-grounded conceptual framework, to produce clear guidance on the state of evidence of what works in girls' education.

Intervention

Interventions designed to address gender-related barriers to girls' schooling, including:

- Any of the gender-related barriers listed in Figure 1;
- Other gender-related barriers not listed in Figure 1. Intervention identification here may fall under one of two categories:
 1. Authors of the identified study indicate that an intervention is designed to address a gender-related barrier not listed in Figure 1, or
 2. Authors of this review study identify an intervention that is designed to address a gender-related barrier, corroborated with studies identified using the criteria under category (1) above.

Interventions and policies under investigation may take place at the pre-primary, primary, or secondary levels or may be non-formal.

We exclude interventions to remove financial barriers as recent systematic reviews on this topic already exist (Baird et al, 2013; Petrosino et al 2012).

Population

The focus of the review is on girls living in low- and middle-income countries as defined by the World Bank. We will also review studies that include boys in order to investigate gender differences in the effectiveness of the policy or intervention.

Outcomes

Primary outcomes

- 1) Enrollment in primary school
- 2) Grade attainment
- 3) Years of schooling
- 4) Grade repetition
- 5) Absenteeism
- 6) Primary completion
- 7) Progression to secondary
- 8) Secondary completion
- 9) Academic skills (literacy and numeracy)
- 10) Critical thinking

Secondary outcomes listed below will be included if the study also investigates at least one of the above primary outcomes.

Secondary outcomes

- 1) Social and Emotional Learning (CASEL core competencies: self-awareness, self-management, social awareness, relationship skills, responsible decision-making) as well as:
 - a. Resilience
 - b. Communication skills
- 2) Life skills
 - a. Related to health
 - b. Related to learning
- 3) Agency
- 4) Critical consciousness
- 5) Mental health
- 6) STIs and HIV/AIDS
- 7) Nutrition measures, such as incidence/prevalence of anemia
- 8) SRGBV

- 9) Child marriage (below age 18)
- 10) Adolescent childbearing (below age 18)
- 11) Employment after school-leaving (transition from school to work)

Study designs

Studies that attempt to control for endogeneity¹ through one or more of the following methods will be eligible for inclusion:

- Randomized controlled trials
- Regression discontinuity
- Instrumental variables analysis
- Pre-test/post-test with either:
 - a matched comparison group where the matching procedure is described (e.g. nearest-neighbor matching, propensity score matching) OR
 - a comparison group where treatment and control groups are either stratified or tested for balance, both based on more than one sociodemographic characteristic
- Interrupted time series

Note that studies that use purely qualitative data will be excluded.

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¹ Endogeneity arises when an explanatory variable is correlated with the error term either because it is unobserved/unmeasured, or because there is measurement error, or because there is simultaneity, i.e. it is jointly determined with the dependent variable (Wooldridge 2018).

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Review authors

Lead review author:

Name:	Barbara Mensch
Title:	Senior Associate, Poverty, Gender and Youth
Affiliation:	Population Council
Address:	One Dag Hammarskjold
City, State, Province or County:	New York, NY
Post code:	10017
Country:	USA
Phone:	1.212.339.0640
Email:	bmensch@popcouncil.org

Co-authors:

Name:	Stephanie Psaki
Title:	Associate II, Poverty, Gender and Youth;
Affiliation:	Population Council
Email:	spsaki@popcouncil.org

Name:	Nicole Haberland
Title:	Senior Associate, Poverty, Gender and Youth
Affiliation:	Population Council
Email:	nhaberland@popcouncil.org

Name:	Erica Chuang
Title:	Study Coordinator/Data Analyst, Poverty,
Affiliation:	Population Council
Email:	echuang@popcouncil.org

Name:	Meredith Kozak
Title:	Research Analyst, Poverty, Gender and Youth
Affiliation:	Population Council
Email:	mkozak@popcouncil.org

Roles and responsibilities

- Content: Barbara Mensch, Stephanie Psaki
- Systematic review methods: Barbara Mensch, Stephanie Psaki, Erica Chuang
- Statistical analysis: Erica Chuang
- Information retrieval: Erica Chuang, Meredith Kozak and/or TBD project staff
- Advisory group members: David Evans (World Bank), Matthew Jukes (RTI International), Cynthia Lloyd (Independent Consultant), Patrick McEwan (Wellesley College), Birte Snilstveit (3ie)

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