



# The Takeaway

Policy Briefs from the Mosbacher Institute for  
Trade, Economics, and Public Policy

## Female Role Model Impact on the Gender Attitudes of Children

### Evidence from Elementary Schools in Somalia

DANILA SERRA

Economics Dept. & The Bush School, Texas A&M University

*Achieving an education in the poorest countries is difficult. Both infrastructures and human resources may be lacking, and the demand for education may be low. Moreover, the prevailing gender norms may be biased against women, leading to severe imbalances in access to education and higher-return jobs. This brief reports on an intervention consisting in male and female college students visiting elementary schools in Somalia, with the aim of increasing educational aspirations and reducing gender inequality.<sup>1</sup>*

Children in developing countries face numerous barriers to the attainment of education. Depending on the context, school attendance may be constrained by lack of physical and human resources, high immediate costs, and low expected returns. In addition, girls may need to battle traditional social norms that



Photo by Spencer Platt/Getty Images

#### WHAT'S THE TAKEAWAY?

Children in fragile countries with low female participation in education and labor markets are unlikely to interact with highly educated women.

Exposing children in Somalia to female college students had a positive impact on both boys' and girls' attitudes toward gender equality.

Being exposed to female, or male, college students had no impact on children's aspirations to go to college.

favor the educational attainment of boys over that of girls and limit the range of occupations, if any, that women can aspire to.

In Somalia, a rarely studied fragile country in East Africa, literacy rates are among the lowest in the world.<sup>2</sup> In 2018, the World Bank (2019) estimated a (net) school enrollment rate of 33%, and of 40-48% amongst children between the ages of 10 and 19.<sup>3</sup> Girls' access to secondary and higher education is especially low, and reflects the existence of gender norms that are biased against women. As a result, women's participation in the labor force is only 19%, amongst the lowest in the world.

## *In Somalia, ...literacy rates are among the lowest in the world*

Due to the scarcity of individuals who attained college degrees, it is hard for children to come into contact and interact with college graduates, especially female graduates. Yet, previous research has shown that graduates can serve as effective role models<sup>4</sup> and significantly impact educational choices, especially of women. Moreover, interacting with women who are pursuing higher education and have non-stereotypical career aspirations may significantly impact the way children think about gender roles and gender (in-)equality.

This brief reports on a study conducted in elementary schools in two Somali regions in collaboration with Save the Children Somalia

to test whether exposing children to role models, i.e., male or female college students coming from similar backgrounds, could significantly impact the children's educational aspirations and their attitudes toward gender equality in education and labor market participation.

### THE STUDY

We involved 46 primary schools in two Somali regions where Save the Children was active at the time of the study. We randomly selected 22 schools to receive the role model intervention and the remaining schools to act as a control group. Within each of the 22 schools, we involved students enrolled in four different grades in the study. We sent two role models, one male and one female college student, to each school, and we randomly selected which of the four "treated" grades would receive a visit from the male or the female role model. The role models each visited two grades and spent about one hour talking about their educational choices, the challenges they encountered along the way, how they overcame those challenges, and what plans they had for their future. The role model intervention took place between April and May 2018.

We tested the impact of the role model visits by collecting survey data in control and treatment schools 6 months after the intervention, i.e., between October and November 2018. The survey was conducted by Save The Children and consisted of a small set of questions measuring students' demographics, their educational aspirations and their gender attitudes. In particular, to measure the latter, we asked students

whether they agreed with the following four statements:

1. “More encouragement in a family should be given to sons than daughters to go to college.”
2. “It is more important for boys than girls to do well in school.”
3. “Boys are better leaders than girls.”
4. “Girls should be more concerned with becoming good wives and mothers than desiring professional or business careers.”

We use the answers to these questions to construct a Gender Equality Index, which ranges from 1 to 4, where 1 indicates attitudes biased toward gender inequality and 4 indicates gender-equal attitudes. The survey was limited to students in grades 5 and up, with most schools having 8 grades. A total of 1,690 students answered all questions in the survey, of which 751 were in control schools and 939 in treated schools. The surveyed students were 14 years old on average, and about half of them were girls. In the survey, we asked students if they had a female close relative, i.e., mother or sister, who went to college. Only about 5% answered positively.

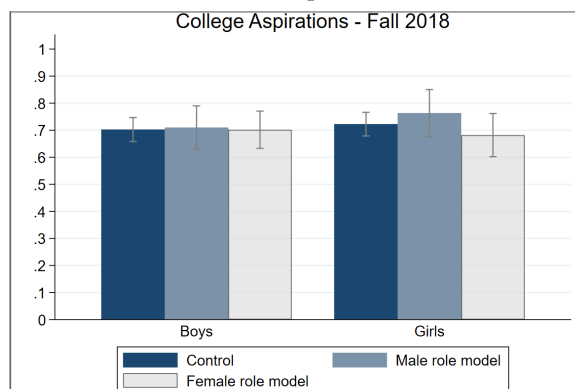
## FINDINGS: THE IMPACT OF ROLE MODELS

Six months after the role model intervention, we see no impact of male college students nor female college students on boys’ and girls’ aspirations to go to college, as shown in Figure 1. About 70 percent of surveyed male and female students aspired to go to college, no matter whether they were in a control school or in a treatment school,

and no matter whether they were in a grade that received a visit from a male or a female college student.

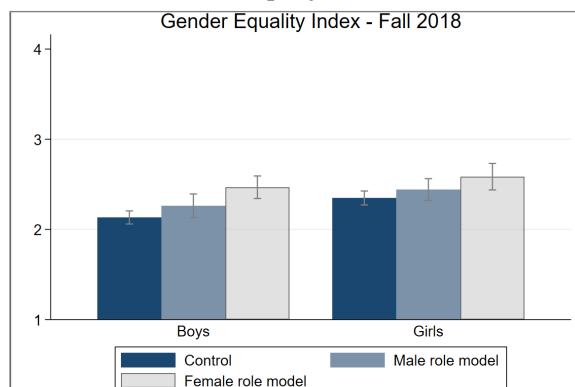
While the role model intervention did not impact education aspirations, it did have a significant effect on boys’ and girls’ gender attitudes. Figure 2 shows that classroom visits by a female role model increased the Gender Equality Index of both male and female students. In contrast, visits by male role models had no impact on gender attitudes. Estimates from regression analysis confirm that the visits by female college students increased gender attitudes toward equality

**Figure 1: The Impact of Role Models on Children’s Education Aspirations**



Source: Author’s survey data.

**Figure 2: The Impact of Role Models on Children’s Gender Equity Attitudes**



Source: Author’s survey data.

by about 0.36 standard deviations, and that male and female students were equally impacted. Moreover, while in control schools the gender attitudes of girls lean significantly more toward equality than those of boys, this gender gap disappears among the students who were visited by female role models. The results are robust when controlling for school and student characteristics.

## CONCLUSION

Overall, we found that a relatively inexpensive and easily scalable role model intervention, which was implemented in a fragile country under difficult logistical circumstances, proved extremely effective in shifting children's gender attitudes toward equality, but had no impact on education aspirations. It is important to note that the effects documented in this brief are short-term effects. Further endline surveys will aim to test whether the effects we saw six months after the role model visits persist over time and end up affecting the students' educational choices, career trajectories, and household dynamics.

**Danila Serra** is an associate professor in both the Department of Economics and the Bush School of Government at Texas A&M University. She is also a Mosbacher Research Fellow. Her research employs experimental methods to examine policy-relevant issues in development, education, and gender economics.

### Notes:

<sup>1</sup> Kipchumba, E.K., Porter, C., Serra, D., Sulaiman, M.

(2021). Influencing youths' aspirations and gender attitudes through role models: Evidence from Somali schools. Working Papers 20210224-002, Texas A&M University, Department of Economics. <https://pvsessions.tamu.edu/RePEc/SerraSomaliaRoleModel.pdf>

<sup>2</sup> UNICEF (2017). *Somalia education cluster annual report 2016*. Technical report, UNICEF.

<sup>3</sup> World Bank Group (2019). *Somali poverty and vulnerability assessment: Findings from Wave 2 of the Somali High Frequency Survey*. Technical Report No. AUS0000407. World Bank, Washington, DC. <http://hdl.handle.net/10986/32323>

<sup>4</sup> Porter, C. & Serra, D. (2020). Gender differences in the choice of major: The importance of female role models. *American Economic Journal: Applied Economics*, 12(3), 226–54. DOI: 10.1257/app.20180426.

<sup>5</sup> Kipchumba et al. (2021).

## ABOUT THE MOSBACHER INSTITUTE

The Mosbacher Institute was founded in 2009 to honor Robert A. Mosbacher, Secretary of Commerce from 1989–1992 and key architect of the North American Free Trade Agreement. Through our four core focus areas—Global Markets and Trade, Borders and Migration, Energy, and Governance and Public Services—our objective is to advance the design of policies for tomorrow's challenges.

### Contact:

Cynthia Gause, Program Coordinator  
Mosbacher Institute for Trade, Economics, and Public Policy  
Bush School of Government and Public Service  
4220 TAMU, Texas A&M University  
College Station, Texas 77843-4220

Email: [bushschoolmosbacher@tamu.edu](mailto:bushschoolmosbacher@tamu.edu)

Website: <http://bush.tamu.edu/mosbacher>

The views expressed here are those of the author(s) and not necessarily those of the Mosbacher Institute, a center for independent, nonpartisan academic and policy research, nor of the Bush School of Government and Public Service.



To share your thoughts  
on *The Takeaway*,  
please visit  
<http://bit.ly/1ABajdH>