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SCHOOLGIRLS NOT BRIDES: SECONDARY EDUCATION AS A SHIELD AGAINST CHILD MARRIAGE

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KEY MESSAGES

- **Child marriage is recognized as a major burden in low-income countries, with severe consequences on women’s life trajectories.** It is particularly pervasive in Niger, where middle school enrollment for girls is low, and dropouts are high. In the context of a multi-sectoral World Bank project, researchers evaluated the impact of a three-year intervention eliminating the financial and logistical barriers for girls admitted to middle school.
- **Offering adolescent girls from vulnerable households in rural Niger scholarships and tutoring upon admission to middle school improved educational outcomes and wellbeing.** Girls that received the program were 53 percent less likely to have dropped out of school at the time of follow up. They also reported a higher degree of life satisfaction. Importantly, there is no evidence that the positive effects on beneficiaries have been at the expense of non-beneficiaries.
- **The program was effective in postponing girls’ marriage or engagement.** Girls who received a scholarship program were 49 percent less likely to be married in the summer following their third year of middle school and 30 percent less likely to be engaged.
- **The intervention raised girls’ educational and professional aspirations for themselves as well as parents’ aspirations for their daughter, plausibly due to changes in girls’ human capital and preferences.** These results suggest that the intervention’s effects are likely to last beyond the mere duration of the scholarship.

AFRICA GENDER INNOVATION LAB

The Gender Innovation Lab (GIL) conducts impact evaluations of development interventions in Sub-Saharan Africa, seeking to generate evidence on how to close gender gaps in earnings, productivity, assets, and agency. The GIL team is currently working on over 80 impact evaluations in more than 30 countries with the aim of building an evidence base with lessons for the region.

The impact objective of GIL is increasing take-up of effective policies by governments, development organizations, and the private sector to address the underlying causes of gender inequality in Africa, particularly in terms of women’s economic and social empowerment. The Lab aims to do this by producing and delivering a new body of evidence and developing a compelling narrative, geared towards policymakers, on what works and what does not work in promoting gender equality.

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CONTEXT

Child marriage remains widespread in West and Central Africa. In Niger, 76 percent of women aged 20-24 got married before age 18 and 28 percent before age 15. In addition, the fertility rate is the highest in the world with 6.2 children per woman.²

Child marriage has major consequences on women's life trajectories, including reducing educational attainment and future participation in the labor market. Once married, girls often drop out of school to devote their time to their new household responsibilities. Although the primary school enrollment rate in Niger has increased significantly over the past 20 years - from 27 percent in 2000 to 65 percent in 2017 - the middle school enrollment rate remains low, especially for girls (21 percent).³ Generally speaking, school dropout is reinforced by the costs of education. Indeed, to enroll their daughters in middle school, parents must often find housing near the school, and face the direct costs of education and the opportunity cost of sending a child to school instead of having them do housework or engage in economic activities.

In this context, the Ministry of Population, the Ministry of Women's Promotion and Child Protection, and the Ministry of Secondary Education in Niger designed an intervention to reduce marriage among adolescent girls by eliminating the direct costs of secondary education. This intervention is a component of the Sahel Women's Empowerment and Demographic Dividend (SWEDD) project, a regional multi-sector World Bank project aiming to address constraints to family planning and women's empowerment in the Sahel.

WHAT WE DID

In the context of the SWEDD project in Niger, researchers evaluated the impact of Toutes les Filles à L'Ecole ("all girls in school") or TFE, an intervention that provided scholarships and tutoring to adolescent girls starting in middle school for a period of three years. Nearly 2,400 adolescent girls across 285 rural villages with no middle schools were randomly assigned to three groups.⁴

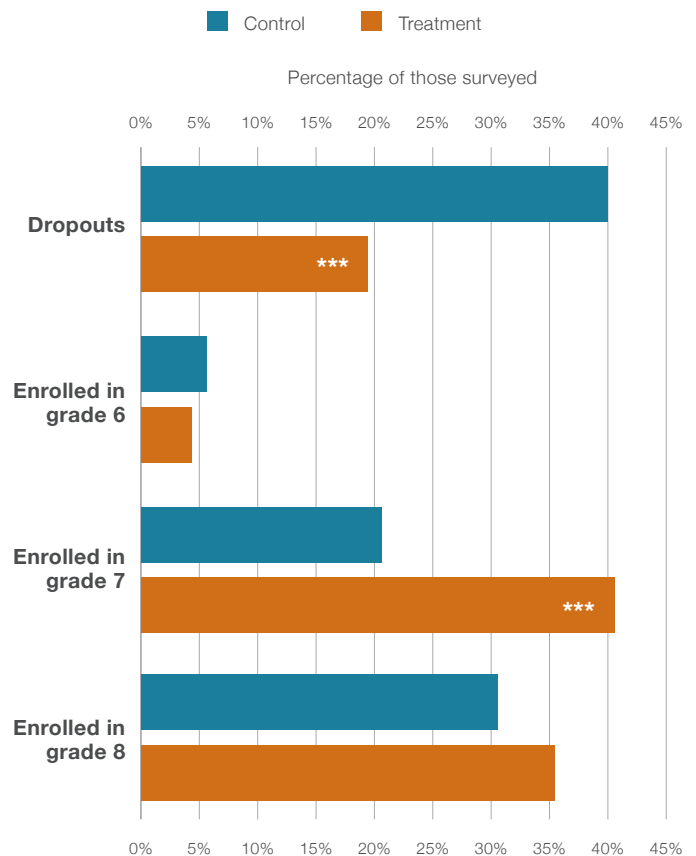
- Treatment group: In 95 villages, every girl eligible for a scholarship received a scholarship (US \$306 per year) covering housing and feeding costs so that girls

could find a host family living closer to their school. In the middle schools where scholarship girls were enrolled, tutoring was also set up (4 weekly hours of tutoring lessons in French and Mathematics). It was open to all and not mandatory for scholarship girls.

- Mixed group: In 95 villages, a randomly selected half of all eligible girls received the intervention while the other half did not receive it.
- Control group: In 95 villages, no girls received the intervention.

The program spanned the first three years of middle school. In the summer following the third year (a few months after the last scholarship payment) researchers surveyed the study participants and measured the impact of the program on educational and labor market outcomes, marriage, aspirations, and empowerment.

FIGURE 1: IMPACT ON EDUCATION



Note: The symbols */**/** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

² Institut National de la Statistique. ENAFEME Niger 2021.

³ Enrollment rates from <https://data.worldbank.org/indicator/SE.SEC.ENRR.FE> (last accessed in February 2022).

⁴ Villages included in the sample were located in five of the country's seven regions: Dosso, Maradi, Tahoua, Tillabéry, and Zinder. Only two regions, Agadez and Diffa, were excluded from the study, the former because its fertility rate is lower than in the rest of the country and the latter for security reasons.

WHAT WE FOUND

The intervention improved educational outcomes among adolescent girls. Girls in treatment communities were 53 percent less likely to have dropped out of school at the time of follow up. Girls' overall numeracy scores increased by 0.18 standard deviations, but the program had no statistically significant effect on overall literacy scores. These findings show that education costs constitute an important barrier to girls' secondary education, and that scholarships can be very effective at reducing dropouts.

The program also led to postponed marriage. Girls in treatment communities were 50 percent less likely to be married in the summer following their third year of middle school and 30 percent less likely to be engaged. While it was too early to measure an impact on pregnancy (only 3 percent of girls in the control group had ever been pregnant at endline), the ideal age for having a first child increased by one year.

The program increased life satisfaction, along with educational and professional aspirations. Notably, the intervention induced an increase in reported life satisfaction of 25 percent of a standard deviation, which is a substantial welfare gain, suggesting that during adolescence, remaining in middle school is beneficial for individual wellbeing, even for those who struggle in school and have to repeat a grade.

Girls who received the scholarship intervention wished to attend and finish high school and felt more able to do

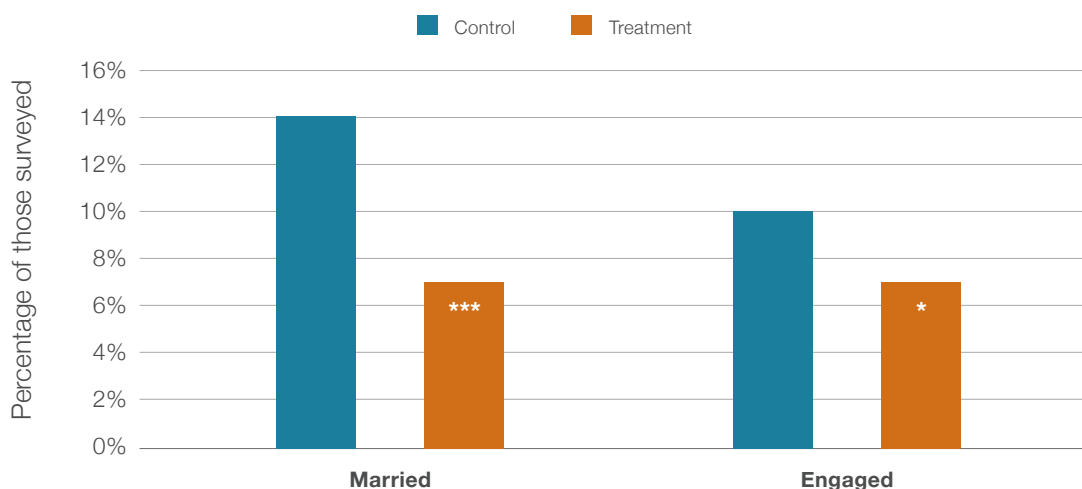
so. Beneficiaries of the program were 53 percent more likely to want higher education. In terms of professional aspirations, girls who received the scholarship were more likely to desire qualified and administrative occupations (e.g. employee, intellectual and scientific profession, administrative authority, manager or technician, etc.) compared to a non-qualified and non-administrative occupation (e.g. farming, household work, self-employed in trade, craftswoman, etc.). The intervention similarly changed parents' aspirations for their daughters: the parents of the adolescent girls in the treatment group were more likely to prefer that their daughters pursue higher education, have qualified and administrative occupations, and get married later, suggesting that parental preference for early marriage can respond positively to financial support for their daughter's education.

These results (in particular the ones on girls' and parents' aspirations) suggest that the effects of the intervention may extend beyond its duration.

Notably, after the program, girls had a preference for later marriage for both men and women, and longer education for their children for both sons and daughters. This indicates that similar programs can have a positive impact on the education of future generations.

Overall, the TFE program has been found to be relatively cost-effective in comparison to other similar initiatives, with a total program cost of US\$1,027 (2019 USD) per girl over the three years of implementation. While it falls behind some initiatives in relation to education and child marriage outcomes, the program increases education

FIGURE 2: IMPACT ON MARRIAGE



Note: The symbols */**/** denote statistical significance at the 10%, 5%, and 1% levels, respectively.



years by 0.04 for every US\$100 and prevents 0.17 child marriages per US\$1,000 invested, outperforming several similar programs.⁵ Moreover, there is no evidence suggesting that the program caused externalities (negative or positive) on non-beneficiary adolescent girls. Indeed, in the TFE intervention, the positive impact on treated girls did not come at the cost of lower education or earlier marriage for non-treated girls living in the same households or villages.

POLICY IMPLICATIONS

As suggested by the study's results, alleviating financial and logistical barriers to access to secondary education for disadvantaged girls in rural areas can be effective at increasing enrollment in middle school, reducing early marriage, and improving their wellbeing. A longer-term follow-up would be needed to better assess the impact of the intervention on fertility.

While the longer term impacts of the program need to be studied, the study's results on parents' and daughters' educational, professional, and family-related aspirations suggest that the effects of similar interventions are likely to last beyond the mere duration of the scholarship and may even extend to future generations.

In the context of Niger, characterized by strong gender inequalities and conservative gender norms, offering scholarships to girls starting middle school can have unambiguously large and positive effects at both the individual and the community levels.

For more information on this study, see the Journal Article: [HERE](#)

5 For instance, in relation to education outcomes, the program is more cost-effective than the unconditional cash transfers intervention evaluated in Baird et al. (2011), but falls below the scholarships in Ghana evaluated by Duillo et al. (2022). Regarding child marriage outcomes, it surpasses the voucher program in Colombia evaluated by Angrist et al. (2002), as well as several other programs with no impact. However, it is less cost-effective than BRAC's ELA in Uganda and Kenya's Free School Uniform Program, which prevent 0.42, and 1.11 marriages per US\$1,000 spent, respectively.

Photo credit: Borgarello/World Bank, Brice Delagneau, John Hogg/World Bank, Nestlé

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