

## The Effects of Middle School Scholarships on Child Marriage in Niger

### Researchers:

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**Sector(s):** Education, Gender

**Fieldwork:** Institut National de la Statistique du Niger

**Location:** Dosso, Maradi, Tahoua, Tillabéry, and Zinder Regions, Niger

**Sample:** 285 villages, 2,272 girls

**Initiative(s):** Post-Primary Education Initiative

**Target group:** Women and girls

**Outcome of interest:** Dropout and graduation Enrollment and attendance Student learning Age of marriage Aspirations Gender attitudes and norms Fertility/pregnancy

**Intervention type:** Scholarships

**AEA RCT registration number:** AEARCTR-0003296

**Research Papers:** Schoolgirls, Not Brides: Education as a Shield against Child Marriage

**Notes:** This evaluation was started while Hélène Giacobino and Mathilde Sage were staff members at J-PAL.

**Partner organization(s):** The Ministry of Secondary Education (Niger), Ministère de la Promotion de la Femme et de la Protection de l'Enfance (Niger), Ministère de la Santé Publique, de la Population et des Affaires Sociales du Niger, Nigerien Organization of Innovative Educators (ONEN), Hikima (Niger), The Project Coordination Unit of the Sahel Women Empowerment and Demographic Dividend (SWEDD) Project in Niger, United Kingdom Foreign, Commonwealth & Development Office, World Bank Health, Nutrition and Population Global Practice, Africa Gender Innovation Lab (GIL)

Child marriage is harmful, widespread in parts of the world, difficult to stop, and more prevalent among women and girls than among men and boys. In Niger, over three-quarters of 20- to 24-year-old women married as girls. Government ministries introduced middle school scholarships to cover girls' transportation, housing, and supplies; researchers evaluated how paying for out-of-pocket expenses affected schooling impacts and child marriage. The researchers found that the intervention reduced girls' chance of leaving middle school by 53 percent and reduced their chance of getting married as children by 49 percent.

### Policy issue

Child marriage harms girls and women. It reduces both their time spent in school and work skills, as they often can't maintain a household and attend class. Married girls are more vulnerable to domestic violence than women married as adults and are at a higher risk of potentially life-changing or even fatal pregnancy- and birth-related illnesses and injuries. Girls married as children

have children with more health and education problems than the children of women who wed as adults.

Child marriage is common: Globally, over 650 million women married as minors. Child marriage affects girls more than boys. In Central and West Africa, one in five women aged 20 to 24 married as children, while only one in 30 men in that age group married as children. The laws prohibiting child marriage have proven to be insufficient in significantly reducing its prevalence, primarily due to enforcement issues. Can middle school scholarships reduce child marriage rates, get girls to attend school longer, and improve their sense of well-being?

## **Context of the evaluation**

In 2019, Niger ranked last in terms of gender parity and achievements globally. Niger has the world's highest fertility rate, with an average of about seven children per woman. About 76 percent of Nigerien girls wed before age 18, and on average become mothers at 18.6 years old.

Primary school enrollment in Niger is fairly high. But many students, especially girls, do not complete middle school. Sixty-five percent of Nigerien girls and 78 percent of Nigerien boys completed elementary school in 2016. Only 14 percent of girls and 18 percent of boys graduated middle school. In 2014, 10 percent of students who completed elementary school met minimum proficiency standards for reading and math.

Niger's middle schools are mostly in cities. Eighty-three percent of Nigeriens live in rural regions. Middle school tuition is free, but out-of-pocket expenses are not. Out-of-pocket expenses (school supplies, transportation costs, and paying host families living close to the school where the girl can stay) may be a barrier to school. For students to attend middle school, their families must be able to afford it, go without the children's labor, and find their children host families near school.

The Ministry of Population, the Ministry of Women's Promotion and Child Protection, and the Ministry of Secondary Education designed the *Toutes les Filles à l'Ecole* (TFE), or All Girls in School, program to decrease the number of girls getting married and increase the number of girls in middle school.

Eligible girls lived in rural areas without middle schools. Ninety-seven percent of them came from farming families who lived in poverty. Girls accepted at middle schools were given three-year scholarship offers, with conditions requiring that they not drop out of middle school and do not repeat a grade more than once. Scholarships were meant to cover all out-of-pocket expenses including housing, meals, school materials, and clothes. The program distributed cash scholarships to middle schools, which gave the money to students' host families.

When the intervention started, the average girl was about 13 years old. The average GPA for eligible girls was about 5.6 out of 10. Fifty-eight percent wanted to go to college. On average, girls in the program thought the right age for them to get married was 18.4 years old and that the best age to give birth to their first child was a little under 21 years old. Participants wanted 7 children on average. Seventy-two percent of girls' parents never attended school while only 24 percent finished elementary school.



Girls receiving their scholarships for secondary school in rural Niger. Photo: Salifou | Hikima

## Details of the intervention

Researchers conducted a randomized evaluation to test the impact of the TFE program on child marriage and girls' middle school dropout rates. The intervention took place in the regions Dosso, Maradi, Tahoua, Tillabéry, and Zinder. The Ministry of Primary Education, Literacy, Promotion of National Languages and Civic Education selected 285 villages total from the five regions. These villages had a large prevalence of child marriages and pregnancies, few students enrolled in middle and high school, and did not have middle schools. The researchers randomly split the 285 participating villages into three sets:

1. *Full intervention group (95 villages, 787 girls)*: All qualified girls in these villages received a scholarship offer.
2. *Half and half group (95 villages, 786 girls)*: In these villages, half of the qualified girls in each village were randomly given a scholarship offer, with the other half not receiving an offer. This group was meant to measure whether the scholarships caused positive or negative spillovers (i.e., unintended consequences) on non-participating eligible girls.
3. *Comparison group (95 villages, 787 girls)*: In these villages, qualified girls did not receive scholarship offers.

The program distributed cash scholarships to middle schools, which gave the money to students' host families. Each scholarship was valued at XOF 180,000 (US\$306) per year. In October 2017, girls began middle school. In December 2017 and January 2018, the research team carried out an initial survey with 2,272 of the 2,360 eligible girls. The research team also spoke with 2,221 household heads. In August 2020, after families received the last scholarship payments, research staff conducted another survey

with 2,022 of the girls, their mothers, and the household heads. The girls provided answers about their amount of schooling, whether they were married or had children, what they wanted from life, and their gender-related views. The mothers provided answers about what they wanted for their children in terms of education, work, and family.

## Results and policy lessons

The intervention halved girls' child marriage and middle school withdrawal rates, and increased girls' sense of well-being. There were not significant externalities, or unintentional consequences, either good or bad.

*Child marriage:* Girls who received the scholarships were 49 percent less likely to be married three years after the intervention began. Only seven percent of girls in the full intervention group were married three years after the scholarships started, compared to 14 percent of the girls in the comparison group. Twenty-one percent of girls in the comparison group and four percent of girls in the full intervention group married before age 18, a decrease of 17 percentage points or almost 81 percent.

*Education and learning outcomes:* After receiving scholarships for three years, 19 percent of girls in the full intervention group dropped out of middle school while 40 percent of girls in the comparison group did, a 21 percentage point or 53 percent decrease. The researchers suggest the scholarships, which only required girls' enrollment and not repeating a grade more than once, gave families financial freedom to send girls to school. On average, girls in the full intervention group scored 0.18 standard deviations higher on numeracy tests than girls in the comparison group. Strengthening girls' math skills might lead to more job options for girls, which could influence their decision to work and delay pregnancy.

*Well-being:* On a standardized 10-point scale, full intervention group girls reported being 0.25 standard deviations more satisfied with their lives than comparison group girls. Being more satisfied with life was a good thing for these girls. The researchers suggest that attending middle school and not getting married caused the full intervention group girls' increased well-being.

*Educational and family aspirations:* Forty-six percent of full intervention group girls wanted to go to college, a 16-percentage point or 53 percent increase relative to 30 percent of comparison group girls. Girls in the full intervention group wanted to get married over eight months later and start having their own children 10.8 months later than their comparison group counterparts, who reported 20 years old and 21 years old as the ideal ages to get married and start having children. When asked about future children they may have, girls in the full intervention group wanted their future daughters to stay in school for 11.95 years, over 10 months longer than the comparison group.

*Mothers' aspirations for their daughters:* Mothers in the full intervention group wanted their daughters to get married over seven months later than mothers in the comparison group, who thought the ideal age of marriage for their daughters was 20.23 years old. Mothers of intervention group girls are 10 percentage points or almost 36 percent more likely than mothers of comparison group girls to want their daughters to pursue higher education. Twenty-eight percent of comparison group mothers wanted their daughters to attend university, while 38 percent of intervention group mothers wanted this for their girls.

*Spillover effects on other middle school girls:* The intervention did not appear to produce any spillovers, beneficial or harmful, for girls who did not receive scholarships. Exposure to girls who received the scholarships had no impact on girls in the half and half group who did not receive scholarships relative to the pure comparison group in terms of education, child marriage, and well-being. Similarly, there was no difference in impacts between girls in the half and half group who received the scholarships and girls in the full intervention group. Offering girls scholarships did not increase marriage and dropout rates of the girls' sisters and childhood friends who were not offered scholarships.

Better educational competencies, reduced chances for girls to meet boys and men, and changed attitudes about the importance of girls' schooling, childbearing, and marriage might be the reasons for lower child marriage and dropout rates. The cost per girl was US\$705 in 2011, which bought an average of three months and five days' worth of school per girl. Twenty percent of the money was spent on implementation costs. Though the educational results were expensive, the benefits gained from stopping some child marriage and increasing girls' well-being added to the scholarships' value. More research is needed on the

effectiveness of scholarship programs on child marriage among girls with lower academic performance, girls from cities, and girls in other countries with high child marriage and middle-school dropout rates. Future research could also identify ways to implement similar scholarship programs more cost-effectively.

Giacobino, Hélène, Elise Huillery, Bastien Michel, and Mathilde Sage. 2024. "Schoolgirls, Not Brides: Education as a Shield against Child Marriage." *American Economic Journal: Applied Economics*. Forthcoming.

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