Providing Out-of-School Girls with Skills: A Review of the Global Evidence

Shubha Chakravarty, Sarah Haddock, and Ioana Botea

This policy brief reviews recent rigorous evidence on skills development programs for adolescent girls and examines the potential for such interventions to delay marriage and pregnancy.

Why Skills for Girls?
A low level of marketable skills among youth is a widely recognized barrier to employment in many developing countries. After completing primary or even secondary school, youth often lack the skills that employers need. Young women are especially disadvantaged by their lower average educational attainment. Compounding the low levels of skills gained in the formal education system, the market for vocational training is weak in many developing countries. As a result, many youth enter the labor market without the skills needed for success.

For girls who have dropped out of school, skills development can offer an alternative to early family formation and put them on a path toward a healthy future. Increased female employment can affect marriage and fertility outcomes through at least three channels. First, the ability to contribute economically expands the role of women in the household and society and can alleviate social and familial pressure for early marriage and fertility.1 Second, the loss in earnings associated with childrearing is an opportunity cost that may increase young women’s desire to delay marriage and childbearing. Third, higher earnings may improve a woman’s bargaining power within the household and allow her to negotiate contraceptive use and delays in sexual debut or marriage (Sivasankaran 2014).

The literature assessing the effectiveness of skills interventions for adolescent girls in low- and middle-income countries has been expanding rapidly over the past decade.2 However, the evidence base is not deep enough to document consistent and robust impacts across contexts. Instead, the interventions described here are considered “promising,” meaning that at least one rigorous evaluation has shown the intervention to be effective at increasing employment,3 delaying early marriage or pregnancy, or both.

What Works?
Two sets of skills contribute to success in the labor market: life skills and income generation skills. Life skills, or “soft skills,” are “a comprehensive set of universal cognitive and noncognitive skills and abilities, connecting behavior, attitudes, and knowledge” (International Youth Foundation 2014). Life skills, including workplace readiness, emotional regulation, and interpersonal skills, are strongly correlated with labor market outcomes (Heckman and Kautz 2012). Many of

---

1 Corno and Voena (2015) shows that households in Tanzania marry their daughters early to obtain bride price payments in response to adverse income shocks.

2 While this series of policy briefs defines adolescence as ages 10 to 19, some of the studies reported here focus on slightly different ages.

3 Employment is defined broadly to include any type of income-generating activity.
these skills are best developed in early childhood, but adolescence offers a crucial window of opportunity, as many of these skills are much harder to develop at later ages (Borghans et al. 2008). Income-generation skills include the technical and business skills needed to earn a living. Technical and vocational education and training (TVET) programs have a mixed record of securing employment for graduates and an even worse record of cost effectiveness (Blattman and Ralston 2015). Business and entrepreneurship skills programs are especially important in countries where the scarcity of jobs forces many youth into self-employment. Young female entrepreneurs may need support to overcome additional barriers, such as lower access to capital, weak professional networks, and social norms that limit their entry into more profitable male-dominated sectors. However, like TVET, the evidence in support of business skills training is weak at best: Very few evaluations have documented increased sales or business profits (for two reviews of business training programs, see Cho et al. 2014; McKenzie and Woodruff 2012).

In practice, most programs address both life and income-generation skills, so they are grouped according to their primary focus and mode of delivery, community-based or center-based. The programs summarized in table 1 are representative and not intended to be exhaustive. They are among the few rigorously evaluated skills training programs that measure both employment and sexual/reproductive health outcomes.

### Table 1. Selected Programs That Support Life Skills and Income-Generation Skills in Various Countries

| Type of program by country | Program elements | Impacts |
|---------------------------|------------------|---------|
| Community-based           |                  |         |
| Ethiopia: Berhane Hewan   | ✓                | ✓       |
| Uganda: Empowerment and   | ✓                | ✓       |
| Livelihood for Adolescents|                  | ✓       |
| Zambia: Adolescent Girls  | ✓                | ✓       |
| Empowerment Programa      |                  | ✓       |
| Center-based              |                  |         |
| Liberia: Economic Empowerment of Adolescent Girls and Young Women | ✓ | ✓ |
| Dominican Republic: Juventud y Empleo | ✓ | ✓ |
| Nepal: Nepal Adolescent Girls Employment Initiative | ✓ | ✓ |

* Program and evaluation in progress.

Community-Based Life Skills Training

An increasingly popular model for the delivery of life skills involves groups of girls led by female mentors who meet regularly over several weeks or months. These groups serve two critical functions: First, they offer “safe spaces” in which girls are organized and can be reached with a variety of interventions and educational topics. For example, they often include complementary interventions to build financial assets to enhance girls’ control over material resources or build vocational skills. Second, they build social assets, including friendships, trusting relationships, and self-esteem, which can have a positive influence on girls’ livelihoods and health. Community-based life skills interventions tend to target girls as young as 10–11 years old, reaching them before the onset of sexual activity and marriage.

The Empowerment and Livelihoods for Adolescents program is implemented in several countries by BRAC, a nongovernmental organization, and was tested in a randomized controlled trial in Uganda (Bandiera et al. 2015). It operates through adolescent development clubs, where female mentors provide girls with life skills training on sex, reproduction, and marriage, as well as short-term livelihood training in areas such as agriculture or poultry rearing. The evaluation found that, relative to adolescents in control communities, after two years the intervention raised the likelihood that girls were engaging in income-generating activities 72 percent (driven by increased self-employment) and raised their monthly consumption expenditures 38 percent.
Teen pregnancy fell 26 percent, and early marriage and cohabitation fell 58 percent. The share of girls experiencing sex against their will in the previous year dropped from 14 percent to almost half that level, and preferred ages of marriage and childbirth both rose. At a cost of under US$100 per girl per year, the program also scored well on cost effectiveness.

The Population Council, a nongovernmental organization, is implementing promising programs in several countries. For example, the Berhane Hewan program in Ethiopia offered group-based life skills and livelihoods training led by a mentor, coupled with community-wide conversations on early marriage. A quasi-experimental evaluation revealed that impacts were particularly strong for younger adolescents 10–14 years of age, who were 90 percent less likely to be married in the villages where Berhane Hewan was offered and 1.8 times more likely to have used any family planning method. The Population Council also leads the Adolescent Girls Empowerment Program in Zambia, which helps adolescent girls to avoid early marriage, sexually transmitted infections, and unintended pregnancy. It combines three components: 1) group meetings with a mentor in a safe place, 2) savings accounts, and 3) vouchers for free health services. A randomized control trial is underway, with preliminary findings showing improved self-esteem and a significant reduction in unwanted sex among program participants.

Center-Based Technical and Vocational Education and Training
In contrast to community-based life skills programs, center-based TVET programs focus explicitly on developing employment-related skills and usually employ professional trainers. Until recently, most of the evidence on TVET programs in developing countries came from Latin America, where a series of Jovenes programs were evaluated starting in the mid-1990s (see Aedo and Nuño 2004; Attanasio, Attanasio, and Meghir 2011; Nopo, Saavedra-Chanduví, and Robles 2007). These programs had modest impacts, usually larger for young women than men, and tended to cost upward of US$1,000. In the past decade, several TVET programs in Africa and South Asia have been evaluated, with somewhat larger impacts, again with women often faring better than men.

Three evaluations of TVET programs that report sexual or reproductive health outcomes had diverging results, indicating that more research is needed to understand when and how skills development through TVET can influence outcomes such as teen pregnancy. The first program, Juventud y Empleo (Youth and Employment), offered job training to disadvantaged youth in the Dominican Republic (Ibarraran et al. 2014). It aimed to improve the labor market entry of youth 16–29 years of age who did not complete high school through training combining life skills and technical or vocational skills, followed by an internship in a private sector firm. Findings showed that, 18–24 months after graduation, the program led to a 7 percent increase in monthly earnings for employed men and women. Although there were no impacts on employment rates or improvements in job formality for women, pregnancy dropped 5 percentage points among females 16–19 years of age in the treatment group (about 45 percent). The authors concluded that the reduction in pregnancy was due to improved expectations about the future.

The second program, Economic Empowerment of Adolescent Girls and Young Women in Liberia, had a strong impact on employment but not on sexual or reproductive health behaviors or outcomes (Adoho et al. 2014). The program provided six months of classroom-based technical and life skills training, followed by six months of follow-up support to 2,500 young women. A randomized impact evaluation conducted at the end of the program found that employment increased 47 percent and earnings increased 80 percent among participants relative to nonparticipants. However, the program had no impact on a wide range of sexual or reproductive health behaviors and outcomes, including desired fertility, number of sexual partners, condom use, or transactional sex. The evaluation found mixed impacts on fertility, with a decrease in the probability of having a child but a corresponding increase in pregnancies, leading evaluators to conclude that

---

4 Girls wishing to return to school and girls still in school received US$4 worth of school supplies each year instead of the group intervention. Parents of unmarried girls who agreed not to marry their daughters off during the two-year period were given a goat at the end of the program. See also Erulkar and Muthengi (2009).

5 Maitra and Mani (2014) and Cho et al. (2013) evaluate TVET programs in India and Malawi, respectively.

Blattman et al. (2014) evaluate an employment program for youth in Uganda, finding larger impacts for women. None of these evaluations reports sexual or reproductive health outcomes.
participants in the treatment group had delayed pregnancies during the program period, with no net impact on fertility.

Results from a quasi-experimental evaluation of the Nepal Adolescent Girls Employment Initiative were similar (Chakravarty et al. 2015). Through an ongoing program called the Employment Fund, almost 15,000 male and female youth per year receive access to free technical skills training courses, paired with life skills modules for women. In spite of impressive economic impacts (47 percent increase in employment, 72 percent increase in earnings), the evaluation found no impact on knowledge of HIV, desired fertility, contraceptive use, or fertility for either male or female participants one year after the training.

Conclusions
Skills development offers a range of benefits to out-of-school adolescent girls and alleviates a key obstacle to youth employment in developing countries. But do increased skills lead to delays in early marriage and pregnancy? Not always, according to the empirical evidence. Although the global evidence on skills training is growing and despite a theoretical basis for the relationship between skills, employment, and fertility, the documented impacts of skills interventions on sexual or reproductive health outcomes are still too limited to draw strong conclusions. The substantial heterogeneity of what constitutes a skills intervention contributes to the uncertainty.

The strongest evidence is in support of holistic community-based programs that combine information on sexual and reproductive health with skills training and other financial and social assets in girl-only or girl-friendly settings. More research is needed to isolate the impacts of various program components and disentangle the causal pathways leading to delays in marriage and pregnancy.

References
Adoho, Franck, Shubha Chakravarty, Dala T. Korkayah, Jr., Mattias Lundberg, and Afza Tameem. 2014. “The Impact of an Adolescent Girls Employment Program: The EPAG Project in Liberia.” Policy Research Working Paper 8632, World Bank, Washington, DC.

Aedo, Cristian, and Sergio Nuño. 2004. “The Impact of Training Policies in Latin America and the Caribbean: The Case of Programa Joven.” IDB Working Paper 188, Inter-American Development Bank, Washington, DC.

Attanasio, Adriana, Orazio Attanasio, and Costas Meghir. 2011. “Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial.” American Economic Journal: Applied Economics 3 (3): 188–220.

Bandiera, Oriana, Niklas Buehren, Robin Burgess, Markus Goldstein, Selim Gulesci, Imran Rasul, and Munshi Sulaiman. 2015. “Women’s Empowerment in Action: Evidence from a Randomized Control Trial in Africa.” Working Paper: World Bank, Washington, DC; Department for International Development, London.

Blattman Christopher, Nathan Fiala, and Sebastian Martineq. 2014. “Generating skilled self-employment in developing countries: Experimental evidence from Uganda.” Quarterly Journal of Economics 129 (2): 697–752.

Blattman, Christopher, and Laura Ralston. 2015. “Generating Employment in Poor and Fragile States: Evidence from Labor Market and Entrepreneurship Programs.” Working Paper, Columbia University, New York; World Bank, Washington, DC.

Borghans, Lee, Angela Lee Duckworth, James Heckman, and Bas ter Weel. 2008. “The Economics and Psychology of Personality Traits.” Journal of Human Resources 43 (4): 972–1059.

Chakravarty, Shubha, Mattias Lundberg, Plamen Nikolov, and Juliane Zenker. 2015. “The Role of Training Programs for Youth Employment in Nepal: Impact Evaluation Report on the Employment Fund.” Working Paper, World Bank, Washington, DC.

Cho, Yoongyoun, and Maddalena Honorati. 2014. “Entrepreneurship Programs in Developing Countries: A Meta-Regression Analysis.” Labour Economics 28 (C): 110–30.

Cho, Yoongyoun, Davie Kalomba, A. Mushfiq Mobarak, and Victor Orogco. 2013. “Gender Differences in the Effects of Vocational Training: Constraints on Women and Drop-out Behavior.” Policy Research Working Paper 6545, World Bank, Washington, DC.

Corno, Lucia, and Alessandro Voena. 2015. “Selling Daughters: Age of Marriage, Income Shocks, and Bride Price Tradition.” Working Paper, Queen Mary University of London; University of Chicago.

Eulkar, Anabel S., and Eunice Muthengi. 2009. “Evaluation of Berhane Hewan: A Program to Delay Child Marriage in Rural Ethiopia.” International Perspectives on Sexual and Reproductive Health 35 (1): 6–14.

Heckman, James, and Tim Kautz. 2012. “Hard Evidence on Soft Skills.” Labour Economics 19 (4): 451–64.

Ibarraran, Pablo, Laura Ripani, Bibiana Taboada, Juan Villa, and Brigida Garcia. 2014. “Life Skills, Employability, and Training for Disadvantaged Youth: Evidence from a Randomized Evaluation Design.” IZA Journal of Labor and Development 3 (1): 1–24.

International Youth Foundation. 2014. Strengthening Life Skills for Youth: A Practical Guide to Quality Programming. Baltimore, MD: International Youth Foundation.

Maitra, Pushkhar, and Subha Mani. 2014. “Learning and Earning: Evidence from a Randomized Evaluation in India.” GCC Working Paper 14–05, University of Pennsylvania, Philadelphia.

McKenzie, David, and Christopher Woodruff. 2012. “What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?” Policy Research Working Paper 6202, World Bank, Washington, DC.

Nopo, Hugo, Jaime Saavedra-Chanduvi, and Miguel Robles. 2007. “Occupational Training to Reduce Gender Segregation: The Impacts of ProJoven.” IDB Working Paper 623, Inter-American Development Bank, Washington, DC.

Sivasankaran, Anitha. 2014. “Work and Women’s Marriage, Fertility, and Empowerment: Evidence from Textile Mill Employment in India.” Job Market Paper, Harvard University, Cambridge, MA.