

MONEY MATTERS: TRAINING YOUNG WORKERS OF TOMORROW IN INDONESIA

RESULTS FROM A RANDOMIZED CONTROLLED STUDY

A Skills to Succeed
Research Report



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PHOTO CREDITS: SUSAN WARNER, SAVE THE CHILDREN

FRONT COVER PHOTO CAPTION: Nurul Sirha (18 years old), a Skills to Succeed student, works in Microsoft Excel at the Binus Training Center

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EXECUTIVE SUMMARY

Finding effective ways to help young people obtain jobs is one of the most important policy challenges of today. Youth unemployment is increasingly linked to low skills and inadequate preparation for the labor market. Vocational training programs are an important tool for young people to invest in the skills they need to compete for jobs. These programs have led to significant improvement in employment, earnings and other non-market outcomes for youth in low and middle income countries. It is essential to understand why young people may fail to pursue and complete market relevant training to design better policies in the future.

As part of the Skills to Succeed's program operational research agenda, a randomized controlled study was done in Indonesia to assess how cost influences young people's participation in vocational training. Less than half of young people in the Skills to Succeed program areas in Indonesia were confident that they had the necessary skills and experience for paid work or to start a business. A randomized controlled trial of 1,843 young people showed that cost sharing tuition led to lower vocational training enrollment and completion, compared to receiving a full tuition waiver. Women were especially vulnerable to dropping out of training programs.

The study findings suggest that for young people, cost is a barrier to accessing training programs. Future research will aim to clarify the underlying reasons for this result, including youth perceptions of savings and of vocational training. Skills to Succeed will also focus on interventions to help young people accrue capital such as savings programs and training in financial capability. To help reduce drop-outs, special attention will be paid to clarifying why young men and women fail to finish training. These activities will complement rigorous evaluation on the impact of training on a range of vocational, employability skills, entrepreneurship skills, on the job training, and, complementary support services such as mentoring, job counseling, and peer to peer initiatives on the employability and employment outcomes of young people.

BACKGROUND

Save the Children's **Skills to Succeed** program equips deprived and at-risk youth with the skills, opportunities and networks they need to get decent jobs or build their own businesses so that they can make successful transitions to adulthood and break the intergenerational cycle of poverty.

Youth unemployment is a serious problem. For the current generation of young people, it is not easy to transition from school to work. As many as 74 million young people are estimated to be looking for a job.¹ In Indonesia, about 1 in every 4 young people age 15 to 24 are not working, in school or in training.² This suggests that millions of young people are missing out on the opportunity to transition themselves and their families out of poverty and lead fulfilling and productive lives.

A key challenge facing young people looking for work today is a lack of skills.

The knowledge and academic skills gained in school are very important for future earnings and workforce success.³ Although evidence to-date is mostly from industrialized countries, it shows that employability skills^a such as getting along and communicating with others, critical thinking, and self-confidence are equally essential for being a successful worker.⁴ Employers across industries say that there is a significant mismatch between the knowledge, skills and attitudes that youth acquire in school and what they need from entry level workers.⁵ Compared to older workers, young people may also need extra assistance in developing employability skills to find and keep a decent job.^{b 6}

A Snapshot of Indonesia

Population age 10-24¹ - 64.3 million

% of population age 10-24² - 26%

% of 15-24 year olds not in employment, education or training³ - 24%

Country ranking in student performance across 64 OECD countries in:⁴

- Reading: 59th
- Mathematics: 63rd

^a Employability skills include the knowledge, skills, attitudes and behaviors that foster youth workforce success over the long term: social (conflict resolution, context-appropriate behavior, respecting others), communication (oral, written, non-verbal, listening), higher order thinking (including problem solving, critical thinking and decision making), supported by intrapersonal skills of self-control (managing emotions, delaying gratification), and positive self-concept (self-confidence, self-awareness).

^b Save the Children adopts the International Labor Organization's [definition of "decent work,"](#) e.g. opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns and equality of opportunity and treatment for all men and women.

Vocational training programs may be especially helpful to young people in low and middle income countries. The research on training programs in industrialized countries shows that they have had a mixed impact on youth outcomes,⁷ whereas the labor market situation in low and middle-income countries is very different. Many young people have low skills and the relatively few decent and desirable jobs are highly restricted to those who have the necessary qualifications. Due to low education, skills, poor pay, and even hazardous jobs, young people and their families may remain trapped in a cycle of poverty. As discussed in the next section (“Spotlight on Recent Research”), vocational and on-the-job training programs that enable young people to meet the needs of employers offer significant benefits by expanding job options and raising earnings.^c

Young people face many obstacles to accessing training including cost, low social support, or incomplete information about training options and their benefits. These challenges are especially a concern for the poor, who may not be able to afford the tuition for a vocational course. Young women may lack the support of their families to seek training due to conservative attitudes. Household responsibilities such as chores and childcare may make it hard to get to training locations on time. To address these challenges and improve future Skills to Succeed programs, Save the Children completed a randomized controlled trial study among 1,843 young people in Indonesia to determine the influence of cost on vocational training enrollment and completion.

Key Findings from the Skills to Succeed Randomized Controlled Study

- **Cost-sharing led to lower enrollment and completion of vocational training.** Among those asked to pay a small share of the tuition (cost-share group), 55% enrolled in training and 45% finished. Among those who received a voucher for a full tuition waiver, 72% and 64% enrolled and completed, respectively.
- **Women outperformed men in enrollment but they were less likely to finish training.** Two-thirds (66%) of women and 54% of men enrolled in training. Among those enrolled, 20% of women did not finish training as compared to 12% of men.

^c These findings are shown in studies from the Dominican Republic, Mexico and Uganda.

SPOTLIGHT ON RECENT RESEARCH

There is much left to learn about how market relevant training programs improve employment paths for young people in low and middle income countries. Recent studies report on evaluations in which randomized trials were used to measure the impact of training on youth outcomes. They show that these programs created impressive gains for young people, but raise many important questions for future research in this growing area.

WHY RANDOMIZED TRIALS?

People who decide to participate in social programs are usually different from those who do not. In a randomized trial, people are assigned to a program, voucher, or service randomly, like a lottery. Chance alone governs who gets the program. If done well, those who participate in the program are similar to those who do not. These two groups can then be compared to measure average program impact.

Recent Randomized Controlled Trials of Youth Workforce Development Programs

- **Vocational and life skills training led to higher earnings, lower teen pregnancy and higher employability skills.** In the Dominican Republic, young men in the *Juventud y Empleo* program were 17% more likely to have formal sector jobs. Among those who were working, monthly earnings for men and women rose by 7%. Consistent with higher expectations for the future, the program led to a 45% reduction in teen pregnancy. The study points to a need for research in low and middle income settings to clarify which employability skills matter and by how much for youth employment indicators.¹
- **Vocational training and on-the-job internships raised women's earnings by 20%.** In Mexico, the *Jovenes en Accion* program was especially beneficial for young women, leading to an increase in paid work and higher earnings. Even ten years after receiving training, women's earnings are nearly doubled, outweighing the cost of training 2:1. The study suggested a need to assess whether a combination of classroom teaching and on-the-job training is more effective than each component on its own.^{2,3}
- **When given financial capital, young people made large investments in businesses and skilled employment.** In Uganda, cash grants to invest in vocational training or start an enterprise led to a 57% increase in business assets, 17% more hours worked in almost entirely skilled trades, and a 38% increase in earnings. The program had especially strong positive impacts on assets and earnings among young women. The study suggests that cost and credit constraints keep young people from advancing their skills and developing businesses.⁴

RANDOMIZED CONTROLLED STUDY

The motivation of the study was to understand the impact of asking young people to share a portion of the cost of tuition fees on enrollment and completion of vocational training.

The Skills to Succeed study included 1,843 marginalized and at-risk youth age 15-28 and was carried out between August 2013 and June 2014. On average, study participants were 20 years old, 47% were women and 53% were men, 48% had completed either primary or middle school and 50% had a high school education level. Most young people in the study (73%) were looking for paid employment, and a smaller percentage (34%) wished to start their own business.

Less than half of young people in the Bandung and Lampung Skills to Succeed program areas felt confident that they had the necessary skills and experiences for paid work or to start a business. In terms of paid work, 46% felt they had a solid understanding of the skills and experiences valued by employers; 38% felt they had a good grasp of the skills to open a business. The study participants were given a brief literacy and math assessment designed to be well understood by a person with a similar average education level: 23% and 7% correctly answered all the literacy and math items.

The Skills to Succeed program included several training components delivered in different stages.

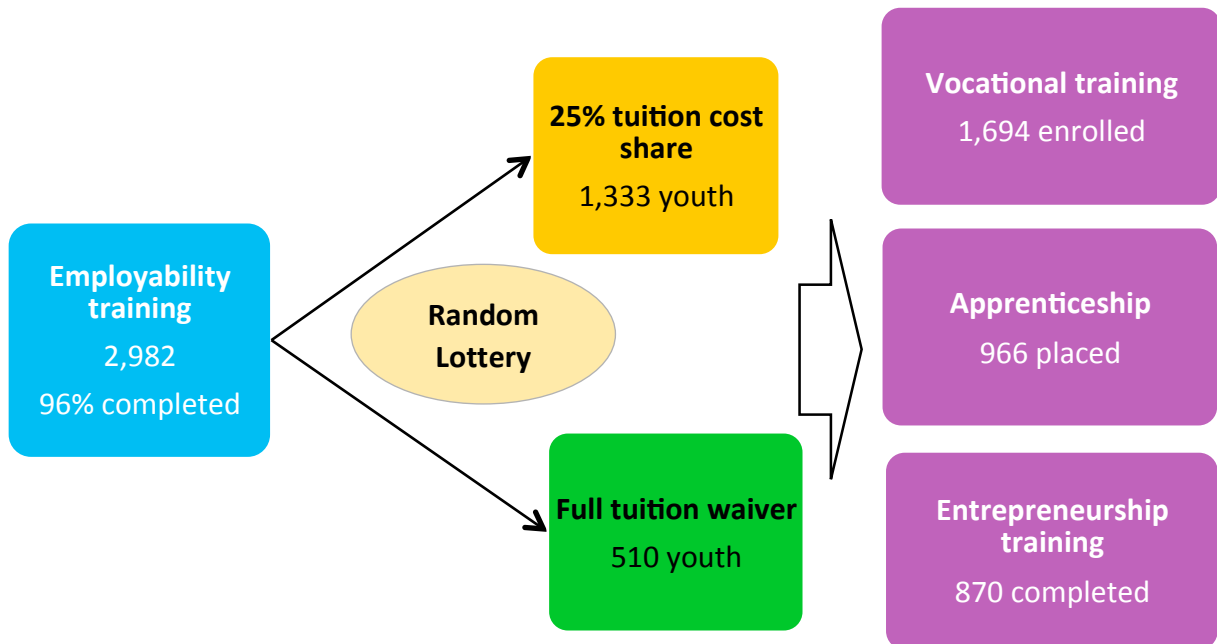
Employability training. In collaboration with local partners, the program provided employability training to Skills to Succeed study participants in the cities of Bandung and Lampung. The training had content on self-awareness, professional appearance and behavior, stress management, initiative, work ethic, flexibility, endurance, teamwork, CV preparation, job search, and workplace safety.

Young people living in Bandung who completed employability training were randomly assigned to one of two groups. A 75% tuition waiver was given to 1,333 study participants. This “cost-share” group was asked to pay the remaining 25% of tuition. A full tuition waiver was given to 510 young people. All participants were given information about the available opportunities for vocational training: Skills to Succeed staff also informed them about the expected returns to investing in vocational education in terms of future salary.

Three types of training were offered to young people who worked with case managers to select the one(s) they preferred.

Vocational course. The program offered classes on popular topics through certified private centers in convenient locations. The average course was 40 hours long over 2.5 months and cost \$127 per student. The curriculum covered areas such as hospitality, sales and retail, garment manufacturing, and printing and design.

Skills to Succeed Study Components



Apprenticeship. Some youth chose to go into apprenticeships after (or instead of) vocational or entrepreneurship training. An apprenticeship lasted from 300 to 600 hours over 3 to 6 months: 966 youth began apprenticeships with 197 unique businesses. About 30% also completed entrepreneurship training.

Entrepreneurship training. Young people interested in starting their own businesses could complete this training along with or instead of vocational courses. This training was approximately 20 hours long and was completed by 870 participants. The classes were given by NGO staff and covered value chain analysis, marketing, and business plan design. About 60% of these participants finished a vocational course.



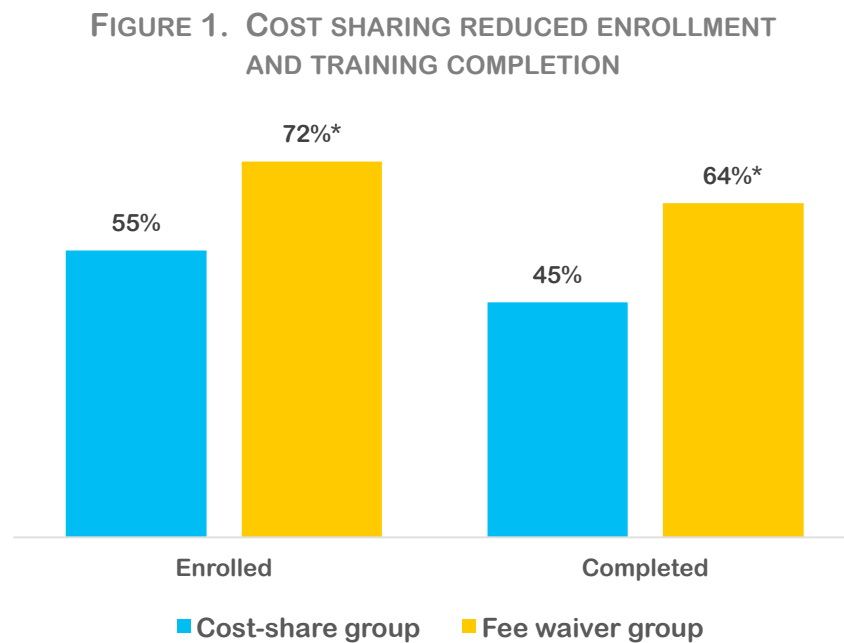
Baseline Profile of Youth

- **Gender:** 47% women, 53% men
- **Average Age:** 20
- **Education Completed**
 - No school: 1%
 - Primary or Middle: 48%
 - Secondary: 50%
 - Tertiary: 1%
- **Looking for paid work:** 73%
- **Would like to start a business:** 34%
- **Felt they have a solid understanding of the skills and experiences needed for:**
 - Paid Work: 46%
 - Opening a business: 38%

RESULTS

Being asked to pay a small share of the cost led to worse training outcomes.

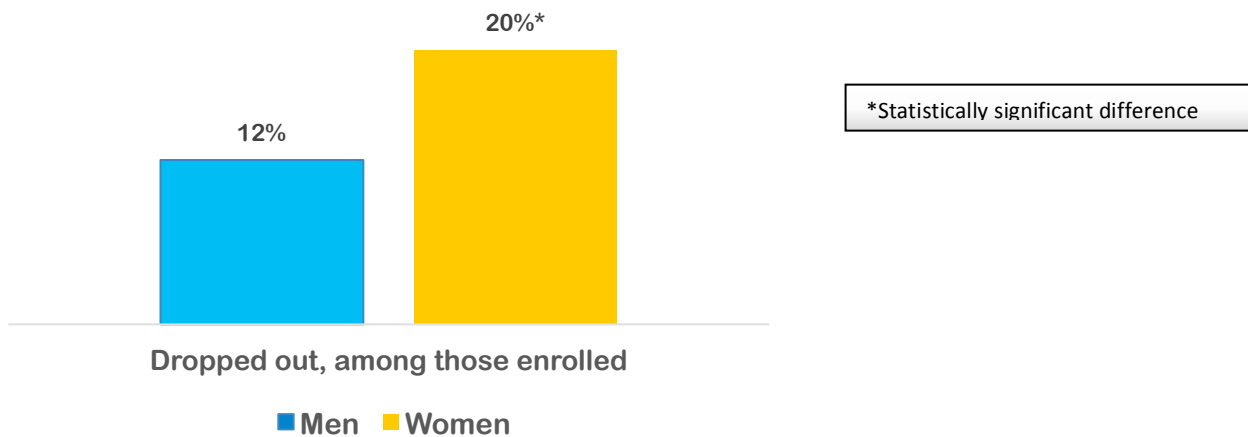
In the cost share group, 55% enrolled in a training compared to 72% of those who received a full tuition waiver. Less than half (45%) of those in the cost share group completed training compared to 64% of those who received a full waiver (Figure 1).



*Statistically significant difference

Women were more likely to enroll in vocational training than men, but they were less likely to complete training. Enrollment in vocational training among women in the study was 12 percentage points higher than men (66% vs 54%). Among those enrolled, 20% of women dropped out of training compared to 12% of men (Figure 2).^d

FIGURE 2. WOMEN WERE MORE LIKELY TO DROPPED OUT OF TRAINING THAN MEN



^d Based on their enrollment and dropout rates, 53% of women and 48% of men completed vocational training.

IMPLICATIONS

Lowering financial barriers encourages young people to enroll in and commit to vocational training. In the Skills to Succeed study, being asked to pay a share of tuition led to lower uptake and completion of training. In light of this result, future Skills to Succeed evaluations will focus on clarifying the reasons why cost is a barrier, and test ways to help youth build up the capital for skills training through savings, financial capability training, and other means.

Young women may face more barriers to completing vocational training than men. As summarized above, recent studies from Mexico and Uganda show that vocational training programs have led to notable gains for women. But in this study they were more likely to drop out of training than men. Depending on the context, women may be more vulnerable to leaving because of family obligations, illness, or long travel distances.¹

Collecting information about why men and women interrupt or leave a vocational program is important to improve impact and cost effectiveness. Randomized controlled trials provide quantitative estimates of program impact but do not reveal why a particular result is found. Qualitative research such as open-ended surveys or focus groups can help interpret the quantitative data. Going forward, complementing quantitative data with qualitative research (known as “mixed methods” research) will be a priority to improve understanding of why people leave training early and inform ways to reduce drop out.

Priorities for Future Skills to Succeed Research

- Do training types and combinations (*i.e.* vocational training only vs vocational and apprenticeships) have different effects on employment outcomes?
- Besides cost sharing, what are other reasons why young people decide not to enroll in or drop out of training? Do the reasons differ by gender, age, or other factors? How can we use this information to deliver programs more effectively (*i.e.* reduce drop-out)?
- Can programs that encourage savings and train young people in financial capability increase enrollment and/or completion of vocational training? Can they also improve employment outcomes, compared to programs that do not include these financial interventions?

ENDNOTES

A Snapshot of Indonesia

1. Population Reference Bureau (2013). [The World's Youth 2013 Data Sheet](#).
2. Ibid.
3. International Labor Organization. [ILOSTAT Database: Country Profiles: Indonesia](#).
4. Organization for Economic Cooperation and Development. [Education GPS. Indonesia: Student Performance \(PISA 2012\)](#).

Background

1. International Labor Organization. (2015). [World Employment Social Outlook: The Changing Nature of Jobs](#). Geneva: International Labor Organization.
2. International Labor Organization. [ILOSTAT Database: Country Profiles: Indonesia](#).
3. Lippman, Laura H., Ryberg, Renee, Carney, Rachel, Moore, Kristin Anderson (2015). [Key “soft skills” that foster youth workforce success: Toward a consensus across fields](#). Bethesda, MD: Child Trends.
4. Ibid. Lindqvist, Erik and Vestman, Roine. (2011). [The labor market returns to cognitive and non-cognitive ability: Evidence from the Swedish enlistment](#). *American Economic Journal: Applied Economics*, 3, 101-128.
5. Mourshed, Mona, Farrell, Diana and Barton. Dominic nd. [Education to employment: Designing a system that works](#). McKinsey Center for Government.
6. International Labor Organization. (2013). [Global Employment Trends for Youth 2013](#). Geneva: International Labor Organization
7. J-PAL, 2013. J-PAL [Youth Initiative Review Paper](#). Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.

Spotlight on Recent Research

1. Ibarraran, Pablo, Ripani, Laura, Taboada, Bibiana, Villa, Juan Miguel, and Garcia, Brigida. (2014). [Life skills, employability and training for disadvantaged youth: Evidence from a randomized evaluation design](#). *IZA Journal of Labor and Development*, 3, 10.
2. Attanasio, Orazio, Kugler, Adriana, and Meghir, Costas. (2011). [Subsidizing vocational training for disadvantaged youth in Colombia: Evidence from a randomized trial](#). *American Economic Journal: Applied Economics* 3, 188-220.
3. Attanasio, Orazio, Kugler, Adriana, Medina, Carlos and Meghir, Costas. (2015). [Long term impacts of vouchers for vocational training: Experimental evidence for Colombia](#). Working Paper 21390. Cambridge, MA: National Bureau of Economic Research.
4. Blattman, Christopher, Fiala, Nathan, and Martinez, Sebastian. (2014). [Generating skilled self-employment in developing countries: experimental evidence from Uganda](#). *The Quarterly Journal of Economics*, 697-752.

Implications

1. Cho, Yoonyoung, Kalomba, Davie, Mobarak, Ahmed Mushfiq and Orozco, Victor. (2013). [Gender differences in the effects of vocational training: Constraints on women and drop-out behavior](#). Discussion Paper 7408. Bonn, Germany: Institute for the Study of Labor (IZA).

Annex: Study Limitations

- **Local partners who implemented the study knew each participant's cost share lottery status prior to helping them choose a training.** This knowledge may have affected how they guided a young person's choices, introducing error in the estimate of the impact of cost share vs tuition waiver status on training outcomes.
- **Despite random assignment, the cost share vs full waiver group were not comparable on all characteristics.** The two groups were similar in terms of gender and age, but not education level: in the cost-share group, 46% and 53% completed up to high school and high school respectively. In the full waiver group the corresponding percentages are 56% and 43%.
- **Young people who were already receiving full tuition waivers as part of the EXCEED program and their siblings were excluded from the study.** Despite this, the study participants are probably a good reflection of the out-of-school population in Indonesia, as indicated by their socioeconomic profile at the beginning of the study.



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