

POLICY BRIEF

Boosting Adolescent Girls' Agency Through Life Skills Training



Acknowledgements

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I. UNDERSTANDING LIFE SKILLS PROGRAMMES

Globally, fewer investments are made in women's capital than that of men, leading to dire consequences. Human capital can be broadly defined as the stock of knowledge, skills and other personal characteristics that help people be productive (OECD, n.d.). Relatedly, women have lower levels of education, less technical knowledge and fewer years of skilled experience (UNDESA, 2020). In fact, women make up more than 60 percent of the world's illiterate population, and as of 2020 only 47 percent of working-age women are in the labour force, compared to 74 percent of men (UNDESA, 2015, 2020). Life skills training is intended to empower women so that they can invest in their human capital, thus improving overall outcomes for women.

What factors are contributing to women's underinvestment in human capital?

Historically, women's ability to exercise choice—such as when to have children or whether to engage in income-generating activities—has been constrained and remains limited, especially in low- and middle-income countries. Barriers to women's agency limit their capacity to advocate for investments in themselves, resulting in fewer years of education, more limited labour force participation, and earlier marriages than their male counterparts (Bandiera et al., 2020). As such, removing barriers to agency, and improving incentives in key domains such as education, may lead to greater investment in women's human capital and better outcomes for women overall.

Women experience two types of barriers to agency: external and internal. External barriers refer to issues outside of a woman's control or structural constraints which limit women's choices, such as economic and legal barriers, restrictive gender norms or conflict. Internal barriers are psychological factors that prevent women and girls from exercising their agency. For example, their lowered belief in their self-worth, knowledge and abilities (Chang et al., 2020).

External barriers are typically more difficult (and take longer) to overcome, as they are often deeply ingrained in social, cultural and political systems and structures (Kwauk and Braga 2017). The "stickiness" of external barriers has resulted in an increasing focus on tackling internal barriers to agency in order to improve the human capital of women in the short run (Kwauk and Braga 2017). Life skills programmes can be one way to relieve the internal barriers to agency and strengthen the "power within."

Life skills: A potential avenue for tackling internal barriers to agency?

Life skills are defined as "the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life" (WHO, 1997). Therefore, life skills programmes should aim to provide young girls with these abilities. However, which abilities are they exactly? One of the most challenging aspects of designing life skills programmes is that we lack a unified list of which life skills help individuals deal with the demands of everyday life. This ambiguity is likely because these demands vary depending on the context.

We propose a definition of life skills programmes as "training interventions with psychosocial (e.g. self-efficacy) or soft skills (e.g. negotiation and communication) at their core, sometimes paired with other forms of hard skills training, which strengthen an individual's ability to make critical decisions in their life."

An accompanying life skills theory of change draws from the understanding that empowerment is a process, whereby "exercising agency should culminate in achievements or meaningful improvements in well-being" (Chang et al, 2020). The theory of change for life skills could be represented in Figure 1.

Whilst acknowledging that life skills are not a panacea to improve low human capital accumulation for women, there is growing evidence¹ that life skills programmes may serve as a particularly effective avenue for addressing internal constraints by strengthening women's power within.

Scales et al. (2013); Leventhal et al. (2015); Bandiera et al. (2020); Adoho et al. (2014); Baiocchi et al. (2017); Buchmann et al. (2018); Stark et al. (2018); Amin et al. (2016); Rodella, Cuevas, and Montes (2015); Decker et al. (2018); Özler et al. (2020).

Figure 1. Theory of change for life skills could be represented as follows.

INPUT (Resources)	OUTPUT (Mechanisms/ Resources)	MEDIUM-TERM IMPACT (Agency)	LONG-TERM IMPACT (Achievements)
Soft/psychological and other skills training is provided to target group by facilitators.	Adolescent girls access resources to make them feel they can and are practically able to invest in their own human capital.	Girls gain agency and exercise it by making decisions to improve their lives.	Improved outcomes in education, labour, reproductive health and/or gender-based violence.

Note: It is proposed that life skills programmes provide various resources to girls (input) which through various mechanisms lead to a change in behavior (output). This process, in turn, leads to enhancements in adolescent girls' agency and assists in tackling the internal barriers to agency that adolescent girls may face (medium term impact). Finally, these enhancements in agency may manifest in improvements in education, labor, reproductive health and decreased gender-based violence (long-term impact).

Power within can be defined as the "internal belief in one's worth and ability, measured through aspirations, self-efficacy, and attitudes about gender norms" (Chang et al, 2020).

Power within can boost girls' sense of self-worth and self-confidence, shape their attitudes to gender norms and improve their aspirations, leading them to invest in their own human capital accumulation. Considered fundamental to an individual's ability to make meaningful choices and to act on them (and thus a direct indicator of agency), increases in power within have been shown to lead to positive downstream effects in education and labour market outcomes in a majority of cases. However, the impacts on early marriage/childbearing rates and prevalence of GBV have been mixed.

Looking across the existing evaluated programmes, there is strong evidence that adolescent girls' programmes that included soft and life skills training² improved self-efficacy, confidence, and attitudes towards gender norms. However, they did not consistently improve girls' aspirations related to marriage, childbearing, education and job access. This suggests that soft skills acquisition may be a key pathway through which self-efficacy and gender attitudes among adolescents can be influenced (Chang et al., 2020).

Life skills alone may not be sufficient or appropriate in certain situations

The acquisition of life skills and improved power within alone may not be sufficient to enable girls to act upon their world in a transformative way. This is more likely the case where structures such as policies, institutions, networks, social norms and gender expectations narrow girls' scope for decision-making and action (Kwauk and Braga, 2017). For example, community beliefs of the appropriate age of marriage may prevent girls from choosing who and when to marry, regardless of their attitudes and aspirations for marriage (Buchmann et al, 2018). In other words, external factors that deny girls decision-making power or determine choices for them can impede life skills programmes from having transformative impacts on agency (Chang et al. 2020).

In addition, life skills programmes may be redundant for young women with sufficiently high levels of power within. In some settings, girls may already have a valid sense of their worth and abilities. They may be self-confident and have ambitious aspirations and very progressive gender norms. They may also have strong knowledge, attitudes and skills about many aspects of their private life. In that case, addressing internal constraints may be ineffective in improving other important life outcomes.

These soft skills & life skills programs are sometimes bundled with other interventions such as vocational training, remedial education, reproductive health information or other trainings.



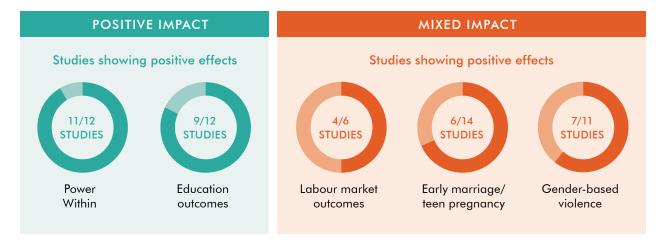
Photo credit: Paula Bronstein, Getty Images, Images of Empowerment

II. CONSISTENCY AND DIRECTION OF IMPACT OF LIFE SKILLS PROGRAMMES

A review of sixteen randomized evaluations³ of Life skills programmes provide insights into the consistency and nuances of life skills programmes' impact on multiple indicators of agency such as power within and downstream outcomes of agency such as education, employment, child marriage, early pregnancy and GBV.

³ See annex for full inclusion/exclusion criteria.

Figure 2.



Note: Positive impact refers to approximately 75 percent or more studies showing a positive and significant effect on at least one indicator related to the domain of interest (e.g. power within, education). Mixed impact refers to less than 75 percent of studies showing positive effects on indicators of interest and thus showing more mixed effects.

1. Positive impacts on power within

The review showed that life skills programmes consistently improved girls' power within. ⁴ Of the 12 studies included in the review that measured power within, 11 show that life skills programmes positively and significantly impact power within. This appears to be consistent across various life skills programmes regardless of whether there is an additional component, such as remedial and/or vocational training, associated with the programme.



See Appendix 2 for more details on the impact of life skills for this domain.

2. Positive impacts on school enrolment, dropout and/or completion

Eighty-two percent (9/11 studies that measured education outcomes) of the life skills programmes we reviewed found significant positive impacts on at least one education-related metric.5 In childhood, schooling decisions are typically viewed as the parents' responsibility. However, children themselves may have some agency in schooling decisions, and thus their preferences around schooling may accordingly be relevant for shifting education outcomes (Edmonds, Feigenberg, and Leight 2021). Whilst being cognisant of the external barriers that limit children's agency and the potential risk of backlash from girls' parents and community, enhancing adolescent girls' decision-making power (with respect to their education), informing them about the returns to education, and/or their ability to advocate for their participation in school may lead to improvements in their enrolment, attendance, and continuation in and completion of school.



See <u>Appendix 2</u> for more details on the impact of life skills for this domain.

⁴ Power within is a composite indicator of agency referring to either self-efficacy, aspirations, or attitudes about restrictive gender norms.

Indicators of education include school enrolment, school attendance, decrease in school dropout and school attainment. At least one of these indicators needed to show positive effects to be classified as having a positive effect on education as a domain.

3. Mixed impacts on employment and income-earning activities⁶

In our review, just over a third of the studies measured and reported labour market outcomes. However four out of the six studies that studied such outcomes were successful in increasing the likelihood of employment and income for adolescent girls.⁷

Life skills programmes enhance soft skills such as communication, decision making, and problem solving—all of which appear to be critical to succeed in the labor market (Adoho et al. 2014). These soft skills training programmes are often paired with vocational training such as hairdressing, soap making, tailoring, or some other training. For example, the soft skills training in the Kishoree Kontha programme in Bangladesh provided adolescent girls with soft skills tools for negotiation, encouraged them to engage in income-generating activities and provided financial literacy training (Buchmann et al. 2018).

However, there may be a trade-off between staying in school and pursuing active income-generating activities. In our review, we see some negative impacts on some labour market outcomes in the Adolescent Girls Initiative (AGI) programme in Haiti.⁸ Three months after the programme ended, the girls were less involved in incomegenerating activities and more engaged with schooling. The authors highlight that the short-term nature of the study may be driving this effect and that a longer-term follow-up may be useful to assess if more profitable income-generating activities are accessed by these girls in the years following school year. Other programmes, not included in this review, specifically target older adolescents to "avoid incentivizing applicants to drop out of school" (Adoho et al., 2014).



See Appendix 2 for more details on the impact of life skills for this domain

- ⁶ Note the limited number of studies
- 7 This more mixed finding differs from the J-PAL agency review, as the scope of the studies for this review is narrower. The same threshold of < 75 percent studies with positive effects is used as a key threshold amount for this review to determine mixed rather than positive impacts. This threshold is consistent with the J-PAL agency review. Our review excluded Adoho et al. (2014) and Buehren et al. (2017a), which focus on older girls. It also excludes Buehren et al. (2017b), which had severe challenges with implementation and take-up of the programme. Our review also includes more recent studies that have been published since the J-PAL agency review was conducted.</p>
- There were also positive and significant effects observed on other outcomes, including increased inclination among girls toward labor activities, such as skilled labor and factory work.

4. Mixed impacts on early marriage and childbearing

Girls' reproductive health choices are associated with agency in complex ways. On the one hand, reproductive health-related outcomes can be indicators of agency. For example, in contexts where girls have more agency to influence decisions, they may be able to delay marriage and childbearing to a time that aligns with their preferences rather than those of parents or other decision makers. On the other hand, poor reproductive health outcomes may also limit girls' scope for decision-making. Early marriage and childbearing can hinder girls' education and future participation in the labour force, preventing them from exercising agency in the future and potentially increasing their dependence on men (Parsons et al. 2015).

Life skills programmes tend to have a mixed impact9 on early marriage and pregnancy. Whilst 12 studies in our review measure related outcomes, only 6 find positive impacts on these outcomes. In particular, there were impacts on the likelihood of marriage and in a few cases the age of marriage. The mixed impact seems to be present regardless of additional components of the programme--for example, vocational or remedial training—that fall beyond the scope of the soft skills component. For example, the BRAC Empowerment and Livelihood for Adolescents (ELA) programme in Uganda, which combines soft skills, reproductive health and vocational training, reduced the rates of early marriage (by 6.9 percentage points) and childbirths (by 2.7 percentage points). Additionally the Pathways to Choice programme that combines soft skills, vocational training and remedial education led to a 480% rise in the likelihood of girls staying unmarried two years after the intervention commenced, increasing from 14% amongst those who did not receive the intervention, to 80% amongst those who did. However, an identical combination of programme components in the Kishoree Kontha Empowerment Programme in Bangladesh had no impact on marriage rates.



See Appendix 2 for more details on the impact of life skills for this domain

⁹ Mixed impacts are defined as 75 percent or fewer of the studies measuring the effects on early marriage and childbearing report positive effects in these domains.

There may also be challenges to measuring effects due to reporting limitations. In India's Girls Empowerment Program (GEP), the age at which marriage was anticipated or desired decreased. The authors note that this shift is primarily driven by a decline of the upper range in the distribution of desired and expected marriage ages. However, the GEP curriculum strongly advocates for 18 as the appropriate and legally acceptable minimum age for marriage. Consequently, girls in the intervention group were more likely to state 18 as their preferred age for marriage as opposed to younger and older age preferences.



See Appendix 2 for more details on the impact of life skills for this domain

5. Mixed impacts on GBV

Adolescent girls' freedom from different forms of violence is closely related to agency. Moreover, women's and girls' ability to exercise agency can be severely limited when they are victims of violence, with sexual violence being associated with poor sexual and reproductive health outcomes, school enrolment and economic participation (Decker et al. 2016). Sustained violence undermines gender equality by conveying the notion that girls are not valued, as well as by curtailing their engagement in education, employment and mobility based on safety concerns and early pregnancy (Decker et al. 2016).

The impact of life skills programming on prevalence of violence against girls or girls' attitudes toward violence is mixed. Ten out of the 16 studies included in this review measured GBV outcomes, and of these, only six found a positive impact, whilst the rest found no impact. Two examples include a programme in Malawi (IMpower) that reduced past-year sexual violence prevalence by 9.2 percent, whilst a programme in Liberia (Girl Empower) had no significant effects on a sexual violence index.

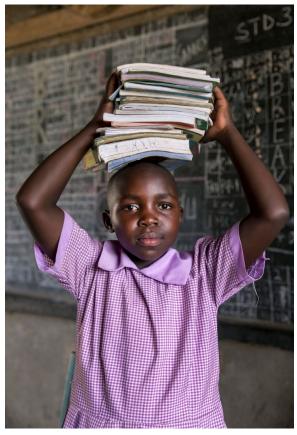


Photo credit: Jonathan Torgovnik, Getty Images, Images of Empowerment

Globally, adolescence marks the period of greatest risk of GBV for girls including child maltreatment, intimate partner violence, child marriage, sexual abuse and exploitation, and female genital mutilation/cutting (Stark et al. 2018). Adolescents' young age and relative inexperience can influence power dynamics in the relationship and incur risk, particularly with older partners (Decker et al. 2016).



See <u>Appendix 2</u> for more details on the impact of life skills for this domain

Mixed impacts are defined as 75 percent or fewer of the studies that measured gender-based violence or forced/transactional sexual relations, show positive effects on the gender-based violence or forced/transactional sexual relations domain.



Photo credit: Jonathan Torgovnik, Getty Images, Images of Empowerment

III. MECHANISMS BEHIND LIFE SKILLS IMPACT

Across several studies reviewed, we hypothesise the existence of at least four key "behavioural mechanisms" boosting adolescent girls' agency and subsequently improving various downstream outcomes within the education, labour, marriage/childbearing and GBV domains.

PROPOSED PATHWAYS FOR IMPACT:



1. Power Within

Improve girls' power within (confidence, aspirations and gender attitudes), allowing them to envision different alternatives for their lives.



2. Information

Provide girls with additional information that changes the costbenefit calculations of investing in human capital development.



3. Bargaining

Give girls tools to negotiate for what they want.



4. Social Bonds

Help them build stronger social networks to support their decision-making process.

Importantly, there could be more mechanisms beyond these four pathways. In addition, these four mechanisms could be operational in more domains than we can illustrate with the available evidence.

1. Power Within

Considered a direct indicator of agency, increases in power within are both an end in themselves and a mechanism through which positive downstream impacts in education, labour, marriage/childbearing and GBV may be realised. For example, in Uganda, the BRAC ELA programme11 increased girls' aspirations around the most suitable age for childbearing and marriage, and increased their engagement in income generation, which likely reinforced their control over their own bodies.

Depending on the context, there likely is a balance between raising aspirations and managing frustrations. In instances where individuals perceive their social environment as restrictive to their potential, feelings of frustration and dissatisfaction may emerge (Rodella, Cuevas, and Montes 2015).

In Haiti, the AGI aimed to find a delicate balance by acknowledging the impact of aspirations on decisionmaking whilst empowering individuals to pursue them within the constraints of their environment. It incorporated career guidance throughout the training to assist participants in establishing practical expectations. This involved introducing various career and technical training paths, outlining their distinct features, opportunities and benefits, with the guidance of past female trainees working in those specific sectors. Additionally, conversations during soft skills training aided participants in formulating a well-adjusted plan based on realistic expectations for their future steps.

¹¹ The BRAC ELA programme in Uganda paired vocational skills training with reproductive health training, including providing girls with legal knowledge on women's issues such as bride price, child marriage and violence against women.



🌪 2. Information

I. Understanding

life skills

Life skills programmes may also provide new information to girls which allows them to reconsider cost/benefit calculations around certain decisions such as early marriage, labor opportunities and investments in education.

For example, in the BALIKA program, girls in the genderrights intervention group were provided with education on sexual and reproductive health, gender rights, and genderbased violence. The participants were exposed to gender rights, as well as issues related to sexual and reproductive health rights, with the aim of altering values associated with gender roles by reordering power dynamics, and gender-based division of labour. The researchers show that there was a significant increase in knowledge concerning menstruation, sexually transmitted infections, HIV-AIDS transmission routes, and family planning when compared to communities in the comparison group who did not receive the intervention.

This information may be a pathway that leads to improvements on marriage outcomes. In communities where girls received life skills training on gender rights and negotiation, critical thinking, and decision-making, girls were approximately a third less likely to be married as children than girls in the comparison communities.



3. Bargaining

Life skills programmes can also help girls to more persuasively communicate their desires and hopes to others and to negotiate with other decision makers for higher investment in their human capital. They may also help girls who are motivated to stay in school to bargain with other decision makers in their households on key enrolment decisions. In contexts where girls want to go to school but parents have different preferences, giving girls the skills to negotiate may help them stay in school for longer. In Zambia, a negotiation training programme for adolescents called Girls Arise! increased enrolment outcomes by enabling strategic cooperation between parents and daughters.

A lab-in-the-field experiment during the intervention showed that girls collaborated more with parents, making simultaneous transfers to parents in response to increased educational investments. Concretely, girls spent less time on chores (measured in hours) before and during school hours and spent more time on chores after school, making investments in education less costly. The intervention led to a 5 percentage point increase in enrolment for girls in grade 11 (from 42 percent) and a 10 percentage point decrease in dropouts (Ashraf et al. 2020). However, it's important to note that the negotiation programme mainly had effects for girls in the top 40 percent of the ability distribution in grade 11, likely because they could make a stronger case for continuing education.



III. Mechanisms behind

life skills impact

4. Social Bonds

Last, life skills programmes can help girls build stronger support networks, which may shape their goals and investment decisions. Evidence suggests that these strengthened ties can motivate girls to continue schooling as well as boost girls' education-related aspirations (Edmonds, Feigenberg, and Leight 2021).

The GEP, which combines life skills and mentoring programmes for girls, reduced school dropout rates by 30 percent for girls at the end of grade 7 in India and by 25 percent even up to grade 9. Researchers suggested that the programme strengthened social relationships among girls, fostering a desire to spend increased time in school and helping them overcome discouraging factors like teasing. The expanded social support networks may have also cultivated skills that can be applied. For instance, teasing presents a notable challenge in the GEP context and might have played a role in dropout rates. Although girls are taught in life skills classes to disregard teasing, a unified response to it may prove more effective than an individual one.



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IV. KEY LESSONS AND CONSIDERATIONS FOR THE DESIGN OF A LIFE SKILLS PROGRAMME

There is clear evidence that life skills programmes can serve as a promising avenue for addressing the internal barriers to agency that adolescent girls face and consequently improve a host of downstream outcomes. Drawing on insights from these existing studies, we outline five lessons for the design of a life skills programme. II. Consistency and III. Mechanisms behind direction of impact

1. Life skills programmes may only be effective where internal barriers are a primary cause of low human capital accumulation. If girls are not able to exercise choice due to external factors, life skills programmes may be ineffective or even lead to decreases in life satisfaction for girls.

INTERESTED IN MEASURING **INTERNAL AGENCY?**

J-PAL's Practical Guide to Measuring Women's Empowerment in Impact Evaluations provides details on the strategies that can be used to collect data about women's agency and ability to make choices that positively affect their lives.



Read the guide.

- 2. A good place to start in designing life skills programmes is with the intended objectives of the programme along with an assessment of its appropriateness to meet that objective. With the understanding that life skills programmes try to increase girls' agency by addressing internal barriers, practitioners should consider the following key areas before planning a life skills intervention:
- · Which outcomes am I trying to change for adolescent girls and women?
- Are internal factors responsible for underinvestment in this domain? Are adolescent girls decision makers in these domains, and which aspects of the decisionmaking process can they influence?
- How do external factors affect the decision-making process?

In many contexts, the conclusion will be nuanced. For example, girls may be enrolled in education but have low labour market participation. They may be able to make decisions about certain aspects of their lives and not others, or they may not have decision-making power themselves but can influence decision makers. The point of starting with the objectives is to guide the process of pinpointing decisions over which girls may have influence and where external barriers are not insurmountable. These are the domains where the objectives and efforts of the life skills training should be focused.

- 3. The target age and gender of the participants in the life skills programmes is an important design consideration. There may be some decisions in a woman's life cycle, such as when to marry and have children, that provide key margins for improving agency. To effectively influence these decisions, it will be important to reach the girls before the decision is made. For example, J-PAL's evidence review on women's agency indicates that boosting agency within a marriage may be tougher than the decision to marry, possibly due to limited options for women after marriage. When it comes to education decisions, researchers highlight that it is "extremely rare for girls to return to school once they have unenrolled" (Buchmann et al, 2018), and thus reaching girls before they drop out of school is critical. In addition, involving boys in life skills training may have benefits for girls' empowerment, although this aspect is still being explored further (Dhar, Jain, and Jayachandran 2022).
- 4. Consider the "why" and contextualise the impact pathways. Thinking through why a programme works can help one unpack the black box of the impacts observed. In addition, working through a theory of change can create a structured way of thinking through the programme. As part of this thinking, it could be useful to consider how the aforementioned mechanisms play out in your context and if your design is facilitating that impact pathway. It is worth taking time to map, understand and be intentional in the way you may want to enhance the salience of key mechanisms (such as power within, information, bargaining and social bonds) given what is known about the context of where the programme is occurring.
- 5. More research is needed to understand when and how life skills programmes improve the lives of adolescent girls and what a scalable model could look like. Although life skills programmes have been shown to be effective, there are several unanswered questions. A key set of questions relate to scalability, such as identifying the most cost-effective combination of components and characteristics to achieve maximum impact. Additionally, gaps remain in our understanding of how to best work with government systems to expand the programme to a larger group of individuals. Specifically, how can we most effectively set up these programmes for sustainability (e.g. through governments)? Further research is encouraged to answer these broad open questions amongst many others. For those interested in collaborating on these questions, please reach out to the Girls' Education and Empowerment Portfolio at J-PAL Africa or by emailing gee@povertyactionlab.org.

APPENDIX 1: DESCRIPTION OF LIFE SKILLS PROGRAMMES INCLUDED IN THE REVIEW

PROGRAM	COUNTRY	AUTHOR	YEAR	TARGET POPULATION	DESCRIPTION
BALIKA	Bangladesh	Amin et al.	2016	Girls aged 12–18	The programme includes livelihood training, gender rights awareness training and education support.
Kishoree Kontha Empowerment programme	Bangladesh	Buchmann et al.	2018	Girls aged 10–19	Provides education support and social competency training.
Compass	Ehtiopia	Stark et al.	2018	Girls aged 13–19 years residing in refugee camps in Ethiopia	Provides a weekly social empowerment program for adolescent refugee girls via a safe space platform with female mentors to reduce adolescent girls' experiences of interpersonal violence in a refugee setting.
Adolescent Girl Initiative	Haiti	Rodella et al.	2015	Vulnerable Haitian young women (17–21 years), out of school for over a year	Offers soft skills and technical skills training to increase women's agency and employability.
Girls Education Programme	India	Edmonds, Feigenberg, and Leight	2021	Girls in grade 6 and 7	Provides life skills training and mentorship. Curriculum included problem solving and critical thinking, as well as social and emotional competencies such as relationship building and self-control. Facilitated by mentors who acted as role models and provided girls with support services.
Girls First Resiliency curriculum	India	Leventhal et al.	2015	Rural, adolescent girls	5-month life skills training programme for rural adolescents. Sessions included social support and psychological wellbeing.

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PROGRAM	COUNTRY	AUTHOR	YEAR	TARGET POPULATION	DESCRIPTION
Girl Groups and Community Campaigns	India	Andrew et al.	2022	Unmarried girls aged 12–19	Girl group education and sports sessions for girls focused on reversing internalised gender norms and promoting gender equity. In some cases, these were paired with broader community engagement by the Girl groups.
<u>IMpower</u>	Kenya	Baiocchi et al.	2017	Primary school girls aged 10–16 in informal settlements	Comprises an empowerment and self-defence curriculum with the aim of preventing sexual assaults of primary school girls in Kenya.
Girl Empower	Liberia	Özler et al.	2020	Girls aged 13–14	Delivers a life skills curriculum including financial literacy and reproductive health information. Following this, the groups convened for an additional seven weeks to plan a community action event.
<u>IMpower</u>	Malawi	Decker et al.	2018	Female students in primary school grades 5–8 and secondary school grades 1–4.	Provides an empowerment and self-defence curriculum with the aim of preventing sexual assaults of school-age girls in Malawi.
Pathways to Choice	Nigeria	Cohen, Abubakar, and Perlman	2023	Girls aged 11–17	"Offers mentorship through girls' clubs, life skills training and vocational programmes, empowering adolescent girls in Northern Nigeria to postpone marriage and pursue education."

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PROGRAM	COUNTRY	AUTHOR	YEAR	TARGET POPULATION	DESCRIPTION
Empowerment and Livelihood for Adolescents (ELA)	Sierra Leone	Bandiera et al.	2018	Females aged 12–25 years	Provides clubs for young women to meet, offering training in life skills including health and reproductive awareness, financial literacy and vocational skills. Older girls can also access microfinance for starting micro-enterprises.
Goal setting for girls (as part of ELA)	Tanzania	Shah et al.	2022	10–24 year old girls	"Offers females a goal-setting activity to improve their sexual and reproductive health outcomes."
Empowerment and Livelihood for Adolescents (ELA)	Uganda	Bandiera et al.	2020	Females aged 14–20	Provides vocational training and life skills training to adolescent girls in a safe space setting, including information on STIs, family planning, negotiation, conflict resolution and leadership as well as legal knowledge of child marriage, bride price and violence against women.
Girls Arise! – Negotiation skills training	Zambia	Ashraf et al.	2020	Grade 8 girls	A negotiation and safe spaces programme to improve girls' educational outcomes in low-income countries such as Zambia.
The Adolescent Girls Empowerment Program (AGEP)	Zambia	Austrian et al.	2020	Unmarried girls aged 10–19	Provides safe space to girls with female mentors leading sessions on life skills, sexual and reproductive health, HIV and financial literacy.

APPENDIX 2: AGGREGATED LIFE SKILLS EVIDENCE

PROGRAM	CATEGORIES	POWER	EDUCATION	LABOUR	CHILD MARRIAGE AND	GENDER-BASED	Measured Indicators:
TROOKAM	CATEGORIES	WITHIN	EDUCATION	LABOUR	EARLY PREGNANCY	VIOLENCE	Power within: Gender attit self-efficacy aspirations
Girls First Resiliency curriculum (India)	SS + O						Education: Enrollment drop
IMpower (Kenya)	SS + O						attainment
Compass (Ethiopia)	SS + O						Labour : Likelihood of employment income
lMpower (Malawi)	SS + O						Child marriage: Likelihood or age of marriage/pregna
Girls Arise! – Negotiation skills training (Zambia)	SS + O						Gender-based violence: Likelihood of exposure to incidents of GBV / forced or transactional sex
Girl Groups and Community Campaigns (India)	SS + O						
BALIKA (Bangladesh)	SS + RH + O						Categories:
Girls Education Programme (India)	SS + RH + O						SS Soft skills
Goal setting for girls (as part of ELA) (Tanzania)	SS + RH + O						V Vocational skillsRH Reproductive health
Kishoree Kontha Empowerment	SS + V + RE +						information
programme (Bangladesh)	35 + V + KE + RH + O						RE Remedial education
Pathways to Choice (Nigeria)	SS + V + RE + RH + O						O Other (covers a broad re including self defense, self space, and gender right awareness trainings)
Adolescent Girl initiative (Haiti)	SS + V + RH + O						
Empowerment and Livelihood for Adolescents (Sierra Leone)	SS + V + RH + O						Effects:
Empowerment and Livelihood	SS + V + RH + O						Positive effects
for Adolescents (Uganda)							No impact
Girl Empower (Liberia)	SS + V + RH + O						Negative effects Not measured
The Adolescent Girls Empowerment Program (AGEP) (Zambia)	SS + V + RH + O						i voi illeusuteu

APPENDIX 3: NOTES ON THE ANALYSIS

The 16 studies in the review followed the following selection criteria. Studies that:

- 1. Followed definition of a life skills programme as: "a training programme which has psychosocial skills at its core but can be paired with other training (e.g. vocational training or other component)." The "other" component may include gender rights training, self-defence training, etc. The review only included treatments from the studies that had a soft skills component. For example, if there was a treatment that had a "safe space component" but not soft skills training, then that specific treatment was not included.
- 2. Targeted adolescent girls from ages 10–19 years old. We exclude studies involving participants older than 19 or with an average age exceeding 20 years. For example, the Juventud y empleo program (2014) was excluded as it targeted students 16 and 29 years of age and the average age was 22 years. Further studies that were excluded for this reason include Adolescents: Protagonists of Development (Bolivia), Economic Empowerment of Adolescent Girls and Young Women (EPAG, in Liberia), and Adolescent Girl initiative BRAC (South Sudan).
- 3. Was evaluated using an experimental or quasi-experimental method.
- 4. Measured outcomes in at least one domain of interest: power within, education, labour, early marriage and pregnancy, and/or GBV.
- 5. Excluded treatments that only focused on boys in the treatment, although we included the girls-only treatments. We excluded studies where the programme targeted both boys and girls in the same session.

We exclude the <u>ELA program</u> by BRAC in Tanzania in the table comparison, as there were implementation challenges that make the effect sizes/directions difficult to interpret.

BIBLIOGRAPHY

Adoho, Franck, Shubha Chakravarty, Dala T. Korkoyah Jr., Mattias Lundberg, and Afia Tasneem. "The Impact of an Adolescent Girls Employment Program: The EPAG Project in Liberia." Working Paper, April 2014. https://openknowledge.worldbank.org/handle/10986/17718.

Amin, Sajeda, Johana Ahmed, Jyotirmoy Saha, Md. Irfan Hossain, and Eashita Haque. 2016. *Delaying child marriage through community-based skills-development programs for girls: Results from a randomized controlled study in rural Bangladesh.* New York and Dhaka: Population Council. https://knowledgecommons.popcouncil.org/departments_sbsr-pgy/557/.

Andrew, Alison, Sonya Krutikova, Gabriela Smarrelli, and Hemlata Verma. "Gender Norms, Violence and Adolescent Girls' Trajectories: Evidence from a Field Experiment in India." Working Paper, 2022. https://drive.google.com/file/d/1Rg0aeLzXL7A4cdCl5JTYE0-l0sXlaV-F/view.

Ashraf, Nava, Natalie Bau, Corinne Low, and Kathleen McGinn. "Negotiating a better future: How interpersonal skills facilitate intergenerational investment." *The Quarterly Journal of Economics* 135, no. 2: 1095–1151. https://academic.oup.com/gje/article-abstract/135/2/1095/5698825.

Austrian, Karen, Erica Soler-Hampejsek, Jere R. Behrman, Jean Digitale, Natalie J. Hachonda, Maximillian Bweupe, and Paul C. Hewett. 2020. "The Impact of the Adolescent Girls Empowerment Program (AGEP) on Short- and Long-Term Social, Economic, Education and Fertility Outcomes: A Cluster Randomized Controlled Trial in Zambia." *BMC Public Health* 20, no. 349. https://doi.org/10.1186/s12889-020-08468-0.

Baiocchi, Michael, Benjamin Omondi, Nickson Langat, Derek B. Boothroyd, Jake Sinclair, Lee Pavia, Munyae Mulinge, Oscar Githua, Neville H. Golden, and Clea Sarnquist. 2017. "A Behavior-Based Intervention That Prevents Sexual Assault: The Results of a Matched-Pairs, Cluster-Randomized Study in Nairobi, Kenya." *Prevention Science* 18: 818–827. https://doi.org/10.1007/s11121-016-0701-0.

Bandiera, Oriana, Niklas Buehren, Markus Goldstein, Imran Rasul, and Andrea Smurra. 2018. "The Economic Lives of Young Women in the Time of Ebola: Lessons from an Empowerment Program." World Bank. https://openknowledge.worldbank.org/handle/10986/31219.

Bandiera, Oriana, Niklas Buehren, Robin Burgess, Markus Goldstein, Selim Gulesci, Imran Rasul, and Munshi Sulaiman. 2020. "Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa." *American Economic Journal: Applied Economics* 12, no. 1: 210–259, https://doi.org/10.1257/app.20170416.

Buchmann, Nina, Erica Field, Rachel Glennerster, Shahana Nazneen, Svetlana Pimkina, and Iman Sen. "Power vs Money: Alternative Approaches to Reducing Child Marriage in Bangladesh, a Randomized Control Trial." Working Paper, 2018. https://www.povertyactionlab.org/sites/default/files/research-paper/Power-vs-Money-Working-Paper.pdf.

Buehren, Niklas, Shubha Chakravarty, Markus P. Goldstein, and Vanya Slavchevska. "Adolescent Girls' Empowerment in Conflict-Affected Settings: Experimental Evidence from South Sudan." Working Paper, 2017a. https://www.researchgate.net/ publication/337416318_Adolescent_Girls' Empowerment_in_Conflict-Affected_Settings_Experimental_Evidence_from_South_Sudan.

Buehren, Niklas, Markus Goldstein, Selim Gulesci, Munshi Sulaiman, and Venus Yam. "Evaluation of an Adolescent Development Program for Girls in Tanzania." Working Paper, 2017b. https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-7961.

BIBLIOGRAPHY

Chang, Lucía Díaz-Martin, Akshara Gopalan, Eleonora Guarnieri, Seema Jayachandran, and Claire Walsh. "What Works to Enhance Women's Agency: Cross-Cutting Lessons from Experimental and Quasi-Experimental Studies." Working Paper, July 2020. https://www.povertyactionlab.org/page/what-works-enhance-womens-agency.

Cohen, Isabelle, Maryam Abubakar, and Daniel Perlman. 202. "Pathways to Choice: Delaying Marriage and Increasing Education via Safe Spaces." https://escholarship.org/uc/item/33j1k1k4.

Decker, Michele R., Shannon N. Wood, Esther Ndinda, Gayane Yenokyan, Jacob Sinclair, Nankali Maksud, Brendan Ross, Benjamin Omondi, and Martin Ndirangu. 2018. "Sexual Violence among Adolescent Girls and Young Women in Malawi: A Cluster-Randomized Controlled Implementation Trial of Empowerment Self-Defense Training." *BMC Public Health* 18, no. 1341. https://doi.org/10.1186/s12889-018-6220-0.

Dhar, Diva, Tarun Jain, and Seema Jayachandran. 2022. "Reshaping Adolescents' Gender Attitudes: Evidence from a School-Based Experiment in India." *American Economic Review* 112, no. 3: 899–927. https://www.aeaweb.org/articles?id=10.1257/aer.20201112.

Edmonds, Eric V., Benjamin Feigenberg, and Jessica Leight. 2021. "Advancing the Agency of Adolescent Girls." https://www.povertyactionlab.org/sites/default/files/research-paper/%20Advancing_the_Agency_of_2021.pdf.

Kwauk, Christina and Amanda Braga. 2017. "Translating Competencies to Empowered Action: A Framework for Linking Girls' Life Education to Social Change." Brookings Center for Universal Education. https://www.brookings.edu/research/ translating-competencies-to-empowered-action/.

Leventhal, Katherine S., Jane Gillham, Lisa DeMaria, Gracy Andrew, John Peabody, and Steve Leventhal. 2015. "Building Psychosocial Assets and Wellbeing among Adolescent Girls: A Randomized Controlled Trial." *Journal of Research on Adolescence* 45: 282–295. https://doi.org/10.1016/j.adolescence.2015.09.011.

OECD. (n.d.). "Productivity, Human Capital and Educational Policies." https://www.oecd.org/economy/human-capital/.

Özler Berk, Hallman Kelly, Guimond Marie-France, A. Kelvin Elizabeth, Rogers Marian, and Karnley Esther. 2020. "Girl Empower – A Gender Transformative Mentoring and Cash Transfer Intervention to Promote Adolescent Wellbeing: Impact Findings from a Cluster-Randomized Controlled Trial in Liberia." *SSM - Population Health* 10. https://doi.org/10.1016/j.ssmph.2019.100527.

Parsons, Jeffrey Edmeades, Aslihan Kes, Suzanne Petroni, Maggie Sexton, and Quentin Wodon. 2015. "Economic Impacts of Child Marriage: A Review of the Literature." *The Review of Faith and International Affairs* 13, no. 3: 12–22. doi: 10.1080/15570274.2015.1075757.

Rodella, Aude-Sophie, P. Facundo Cuevas, and Bernardo Atuesta Montes. 2015. *Haiti – Adolescent Girl Initiative (AGI): Project Report Poverty Global Practice*. Washington, DC: World Bank Group. http://documents.worldbank.org/curated/en/106851468186565029/Haiti-Adolescent-Girl-Initiative-AGI-project-report-poverty-global-practice.

Scales, Peter C., Peter L. Benson, Larry Dershem, Kathleen Fraher, Raphael Makonnen, Shahana Nazneen, Amy K. Syvertsen, and Sarah Titus. 2013. "Building Developmental Assets to Empower Adolescent Girls in Rural Bangladesh: Evaluation of Project Kishoree Kontha." *Journal of Research on Adolescence* 23, no. 1: 171–184.

Shah, Manisha, Jennifer Seager, Joao Montalvao, and Marcus Goldstein. "Two Sides of Gender: Sex, Power, and Adolescence." Working Paper, 2022. https://documents1.worldbank.org/curated/en/099304206012293100/pdf/IDU0e16f6a0d098000457009ab707594bb2c52f8.pdf.

BIBLIOGRAPHY

Stark, Lindsay, Khudejha Asghar, Ilana Seff, Gary Yu, Teame Tesfay Gessesse, Leora Ward, Asham Assazenew Baysa, Amy Neiman, and Kathryn L. Falb. 2018. "Preventing Violence against Refugee Adolescent Girls: Findings from a Cluster Randomised Controlled Trial in Ethiopia." *BMJ Global Health* 3, no. 5. https://gh.bmj.com/content/bmjgh/3/5/e000825.full.pdf.

UNDESA. 2015. "The World's Women 2020: Trends and Statistics." https://unstats.un.org/unsd/gender/downloads/ worldswomen 2015_report.pdf.

UNDESA. 2020. "The World's Women 2020: Trends and Statistics." https://www.un.org/en/desa/world-percent80 percent99s-women-2020.

UNDESA. 2020. "Thematic Areas." https://worlds-women-2020-data-undesa.hub.arcgis.com/pages/thematic-areas.

World Health Organisation. 1997. "Programme on Mental Health, Life Skills Education for Children and Adolescents in Schools: Introduction and Guidelines to Facilitate the Development and Implementation of Life Skills Programmes." https://apps.who.int/iris/bitstream/handle/10665/63552/WHO_MNH_PSF_93.7A_Rev.2.pdf?sequence=1&isAllowed=y.