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Adolescent Girls' and Young Women's Economic Empowerment Programs: Emerging Insights From a Review of Reviews

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Abstract

This review of reviews aimed to assess what interventions, especially group-based interventions, show promise in economically empowering adolescent girls and young women in low and middle-income countries (LMICs). In addition, we examined the promise of specific economic components, combinations of components, and core topics. We searched five databases as well as other sources and identified 2,467 citations, resulting in 17 reviews, 10 of which quantified their results. We found too little evidence to classify any of the examined interventions as clearly “effective.” None of the reviews found negative effects or harmful findings, however. Most intervention–outcome pairings were unknown; that is, they were not examined by reviews. While we identified some intervention approaches that were promising, the review findings suggest extensive research gaps in terms of program content, implementation, and measurement.

Introduction

Women's empowerment – the processes whereby women and girls with limited power in their lives gain the ability to exercise choice, define their goals, and act upon those goals (Kabeer, 1999) – is an intrinsic element of gender equality as well as a possible antecedent to better health, delayed age at marriage, and improved education outcomes for children. Yet in many settings, gender norms and patriarchal structures keep women from acquiring the skills and resources they need to succeed in the economic domain, as well as limit their opportunities for safe, equal employment and pay, and their agency to achieve economic outcomes.

The disadvantage women face is baked into the system from early on. UNICEF estimates that child marriage affects an estimated 12 million girls per year, with 37% of young women in sub-Saharan Africa married before the age of 18 (UNICEF, 2020). Poor learning outcomes – 90% of girls in sub-Saharan Africa do not achieve minimum proficiency levels in reading and 86% do not achieve minimum levels in mathematics (UNESCO Institute for Statistics, 2017) – potentially undermine future employment opportunities. Indeed, globally, the proportion of young women not in employment, education or training (NEET) is more than twice that of young men (31.1% among females versus 13.8% among males), with far wider gender gaps in some settings, such as South Asia (48.8% females versus 14.0% males) and more moderate gender gaps in other regions, such as sub-Saharan Africa (23.5% females versus 14.5% males) (modelled estimates 2019; International Labour Organization, 2020). Inequitable gender norms that underlie decisions about marriage, length of education, experience of violence and harassment, and acceptable work options for girls and women play a role in most settings.

Such gender-related barriers place enormous hurdles in front of girls' and young women's achievement of empowerment and economic well-being. They determine not only when girls enter the workforce, but also shape what type of employment they may have access to (or not), the income they will receive, and the safety of their vocation. System shocks, including climate- and conflict-related disruptions as well as the current COVID-19 pandemic, amplify these inequalities. Innumeracy, coupled with less access to land, technology, financial services (Demirgüç-Kunt et al., 2018), and public spaces on the one hand (Hallman et al., 2015), and greater pressures to marry and bear children on the other, place adolescent girls and young women, especially those living in poverty, at a profound economic disadvantage compared to their male peers, sexual partners, and husbands.

Because of this gender inequality and its ripple effects on health and other outcomes, economic empowerment is often an aim of programs for girls and young women. While diverse strategies are implemented to achieve this goal, including school-based vocational training, apprenticeships, and access to credit, one popular approach is designed to bring girls together in groups, provide a mentored safe space, and impart skills and social, health, cognitive and economic assets to expand girls' voice, choice and control (Bruce, 2015; Temin et al., 2018).

A longstanding program approach to fostering women's economic empowerment, various women's group types have demonstrated beneficial impacts on women's empowerment, economic outcomes, and health outcomes in some settings, but evidence remains inconclusive (Brody et al., 2015; Desai et al., 2020; Hoffmann et al., 2021; Prost et al., 2013; Kumar et al., 2018). Goals and assumptions for programs for women, while informative, are also not directly transferable to adolescent girls. For example, what are appropriate indicators for success for adolescent girls? Such answers are very different for young women than for younger adolescents ages 10–14 who should be in school. Similarly, expectations about which meaningful decisions girls may have a say over are more limited the younger they are, which has implications for indicator selection. In short, the literature on women's groups is promising, but inconclusive, and it is not clear what programs work to improve economic empowerment outcomes for which girls in what settings.

What Is a Girls' Group?

Girls' groups intentionally bring girls together in girls-only groups to create safe spaces and serve as a platform to deliver content and build girls' social, health, cognitive and economic assets. They also expand girls' connections with peers and mentors, and can foster solidarity, leadership skills, empowerment, and social support. While classroom-based interventions may provide similar content such as health education, and sometimes even use similar interactive, learner-centered pedagogy, girls' groups—like women's groups—have a distinct reason for being and may serve as important mediators for improved outcomes for girls.

Objectives

This review of reviews aimed to answer the following questions: 1) What interventions, especially group-based interventions, show promise in economically empowering adolescent girls and young women in low and middle-income countries (LMICs)? 2) What are the specific economic components, combinations of components, and core topics that hold promise or that need additional research? 3) What are crucial elements for group-based models? 4) What are the gaps in the evidence base in terms of how group models deliver outcomes?

Methods

We conducted a review of reviews to explore what is known and not known about economically empowering adolescent girls and young women. Reviews conducted in 2000 or later were eligible, and while we did not exclude grey literature from our search, only documents in English were included.

Inclusion criteria included:

- *Types of reviews:* Systematic reviews with or without meta-analyses; other evidence reviews that examined rigorous quantitative studies with comparisons and baseline (randomized controlled trials [RCTs] & quasi-experimental studies)
- *Types of participants:* Studies that included adolescent girls and young women (ages 12–35 years). Reviews that included interventions that were mixed sex were also included if study

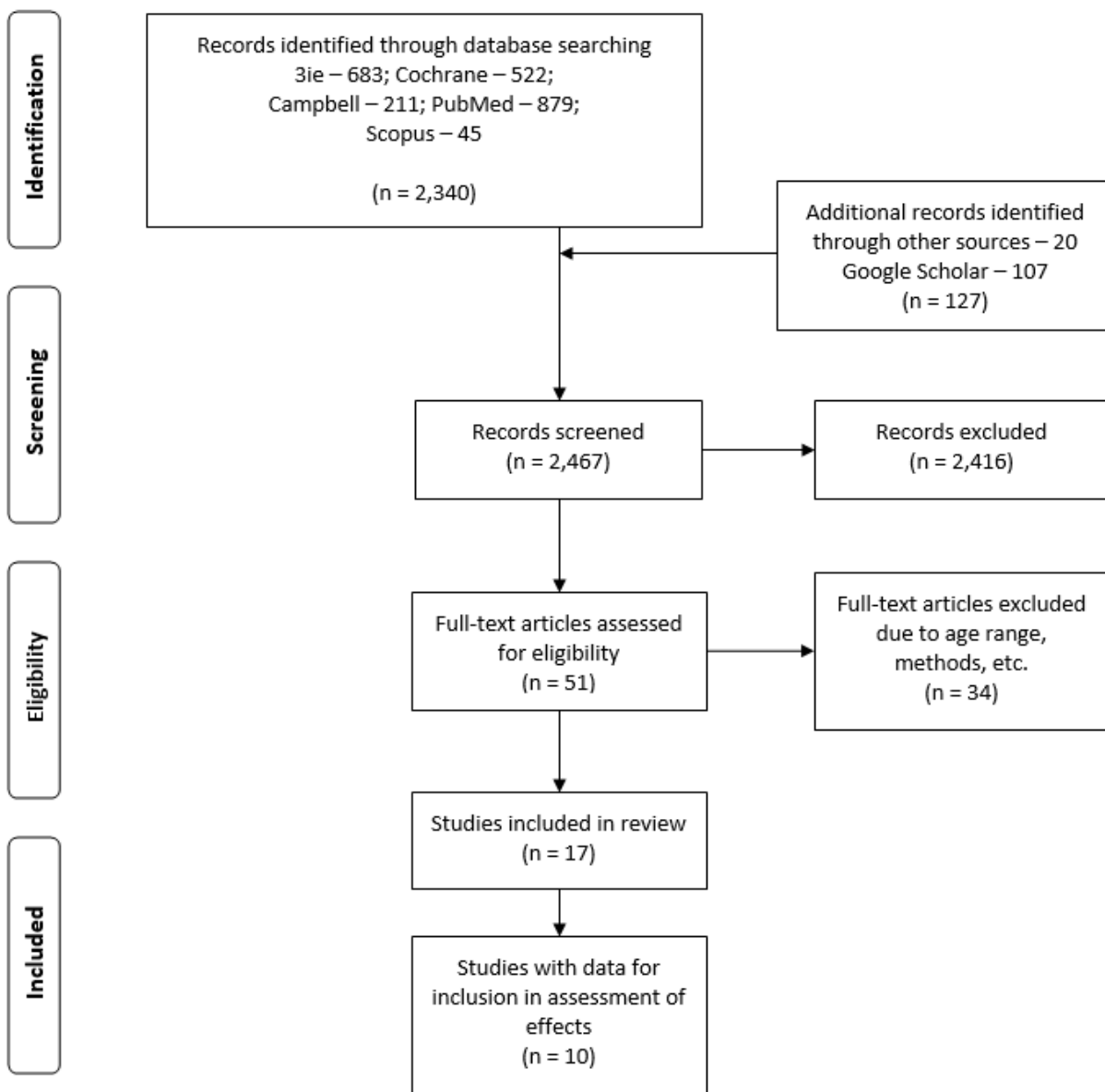
results were disaggregated by or controlled for sex. Reviews that also included adult women were included if at least one third of their studies included adolescent girls and young women. There were no limitations on youth segment or needs (e.g., married and unmarried, in school and out of school).

- *Types of interventions:* Interventions that included an economic/livelihood component such as financial literacy, entrepreneurial skills building, vocational training, linkages from school to work, savings and loan associations/groups, and savings accounts, for example (including multicomponent interventions). In addition, interventions that were evaluated based on economic empowerment outcomes were included regardless of intervention content.
- *Types of outcomes measured:* Reviews that measured effects on:
 - Economic outcomes: e.g., savings, income, employment, entrepreneurship
 - Empowerment: e.g., agency, mobility, decision making, locus of control, power in relationships
 - Other outcome and impact measures – such as sexual and reproductive health (SRH), HIV, gender attitudes, child marriage, aspirations – documented by included reviews were also tracked
- *Geography:* Low- and middle-income countries

We searched six electronic databases – International Initiative for Impact Evaluation (3ie), Campbell Collaboration Reviews, Cochrane Database of Systematic Reviews, PubMed, and SCOPUS, as well as Google Scholar. The reviewers ran searches in the identified databases, turning up 2,447 citations, and integrated 20 additional citations recommended by colleagues (see Figure 1). Two reviewers conducted title and abstract screenings, and excluded nearly 98% of studies due to a lack of relevance. In cases where one reviewer was unsure whether to retain a record, the two reviewers discussed the review and jointly decided to include or exclude. Fifty-one (51) reviews were selected for full-text review, 34 of which were then excluded for reasons such as methodology used and age range of participants. The remaining 17 reviews were split between two reviewers who each extracted data on characteristics of included reviews, interventions assessed, outcomes assessed, and observations regarding gaps in the literature. For the 10 reviews that included quantitative data – e.g., meta-analyses, vote counts¹ – we also extracted their results and/or measured effects.

¹ In vote counting, reviews count how many studies (out of all studies reviewed), and/or how many measured effects (out of all measured effects), demonstrated significant beneficial outcomes.

Figure 1. PRISMA Diagram



Not all reviews exclusively focused on girls; some included all youth, male and female, and some included adult women. For reviews that also included interventions with males, we either used only gender-disaggregated data, or used results where no significant differences were found by gender. We otherwise note if a finding includes data on males. For reviews that also included adult women, where possible, we pulled out studies that focused on girls (as specified in studies' results tables). Where data was combined in meta-analyses, more than a third of studies had to include girls/young women, or we provide a caveat if a finding is predominantly based on data from adult women.

For most of the analyses in this paper, we utilized the 10 reviews that included quantitative results. Where indicated, we included information and insights from all 17 reviews. We

synthesized all intervention and outcome/result pairings included in the 10 reviews as follows. Once a review reported on an intervention–outcome pairing, that intervention and that outcome were included as a row (intervention) or column (outcome) in our results matrix (see Table 1 for row and column labels, Figure 3 for final matrix). If no review reported results for an intervention type or outcome type, that intervention or outcome was not included in the matrix. For example, while mobile banking would be of interest, or effects of interventions on critical consciousness would be important, no reviews assessed evaluations of these interventions and outcomes. Thus, our results matrix is only reflective of the reviews that have been conducted, not the universe of economic empowerment interventions and outcomes.

Table 1. Intervention types and outcomes reported in included reviews (n=10)

Interventions Included	Outcomes Assessed
<p>Economic Interventions</p> <ul style="list-style-type: none"> ▪ Vocational training ▪ Vocational training + internships ▪ Business training ▪ Business training + cash transfers ▪ Financial education ▪ Savings ▪ Financial education + savings ▪ Youth employment programs ▪ Educational incentives ▪ Financial support for education ▪ Cash transfers (social protection approach)* 	<p>Economic Outcomes</p> <ul style="list-style-type: none"> ▪ General/not specified ▪ Employment (paid or self) ▪ Formal employment ▪ Entrepreneurship/self-employment ▪ Earnings/income/profit/sales ▪ Hours worked ▪ Financial literacy ▪ Savings – amount ▪ Autonomy in job search
<p>Combined Interventions</p> <ul style="list-style-type: none"> ▪ Financial education + sexual and reproductive health + self-efficacy support ▪ Livelihood/vocational training + life skills ▪ Microfinance + gender empowerment 	<p>Empowerment Outcomes</p> <ul style="list-style-type: none"> ▪ General/not specified ▪ Empowerment ▪ Economic empowerment ▪ Self-efficacy ▪ Decision making ▪ Aspirations ▪ Time use ▪ Mobility ▪ Awareness of rights ▪ Self-esteem ▪ Leadership skills ▪ Civic/political engagement
<p>Girls' Empowerment Groups</p> <ul style="list-style-type: none"> ▪ Girls' groups with varied content/focus 	<p>Gender Norms</p> <ul style="list-style-type: none"> ▪ Equitable gender attitudes
	<p>SRH, HIV and Health</p> <ul style="list-style-type: none"> ▪ General/not specified ▪ Decreased pregnancy ▪ Decreased HIV incidence ▪ Decreased HSV-2 incidence ▪ Decreased STI symptoms ▪ Mental health outcomes ▪ SRH/HIV knowledge

Interventions Included	Outcomes Assessed
	<ul style="list-style-type: none"> ▪ Health service utilization ▪ Increased condom use ▪ Increased contraceptive use ▪ Delayed sexual debut ▪ Decreased transactional sex ▪ Number of sex partners ▪ Decreased HIV risk behaviours ▪ Increased HIV testing
	<p>Gender-Based Violence</p> <ul style="list-style-type: none"> ▪ Experience of any gender-based violence ▪ Experience of physical violence ▪ Experience of sexual violence
	<p>Other Outcomes</p> <ul style="list-style-type: none"> ▪ Educational enrolment/attainment ▪ Improved literacy ▪ Improved numeracy ▪ Child marriage ▪ Reduced dowry ▪ Increased social support

* As defined by the authors, such approaches use conditional cash transfers (CCTs) or unconditional cash transfers (UCTs) to the household to reduce poverty and “promote social goods, such as school attendance or childhood immunization,” as opposed to cash payments that aim to induce healthy behaviours or outcomes, such as remaining free of sexually transmitted infections (Gibbs et al., 2017, referencing Heise et al., 2013).

Each reported intervention–outcome pairing was then ranked as follows, based on results across the 10 reviews: Effective, Promising, Unknown, Ineffective (see Table 2).

Table 2. Evidence ranking criteria

Effective – clear strength of evidence, beneficial effect	
	Meta-analysis with 3 or more studies that shows beneficial effects (SMD >0.20), or more than one systematic review that shows beneficial effects
	Reviews that vote count* are based on 10 or more rigorous studies (or, if effects, with at least 30 estimated effects) and, for more than 50% of the studies/effects, at least one effect estimate is in the expected direction and statistically significant
Promising – promising strength of evidence, beneficial effect	
	Meta-analysis with 3 or more studies that shows beneficial effects (SMD >0.10 but less than 0.20), one systematic review with beneficial effects, or more than one review (not systematic) with beneficial effects
	Reviews that vote count are based on 3 or more, but fewer than 10, rigorous studies (or, if effects, with at least 15 estimated effects, but less than 30) and more than 50% of the studies/effects have at least one effect estimate in the expected direction and statistically significant
Unknown/more research needed (trend-positive, mixed, trend-negative, unknown) – not well studied, limited, or mixed effects	
	No systematic reviews, meta-analyses, or reviews; inconclusive systematic reviews, meta-analyses, or reviews; conflicting results; null results; or does not fit in other categories.

	Split by trend-positive (results in expected direction but don't yet meet "promising" rank); mixed; trend-negative (results in unexpected direction but don't yet meet "ineffective" rank); and unknown
Ineffective – clear strength of evidence, negative (harmful) effect	
	Meta-analysis with 3 or more studies or more than one systematic review showing significant results not in the expected direction

* We acknowledge that there are limitations to vote counting, as each study is treated equally, which means that the magnitude of the effect and the sample are not considered. We thus set a higher bar for such evidence compared to meta-analyses.

Results

Characteristics of Reviews and Participants

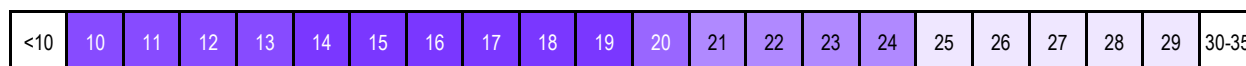
Of the 17 reviews, seven were systematic reviews, six were literature reviews, and four were other kinds of syntheses, such as gap maps or rapid reviews. All 17 reviews were published in 2012 or later – most (13) since 2017. The reviews focused on economic interventions (7), economic empowerment (1), combined structural interventions (1), girls' groups (3), HIV, SRH, and/or intimate partner violence (IPV) (2), soft skills (1), and adolescents/ adolescent girls generally (2). The number of studies included in each review ranged from nine to 113 (median of 42 across the 15 reviews that specified number of studies).

While most reviews included a proportion of interventions that included group-based elements, only three reviews (none of which were systematic) focused on groups per se. In most (9 of 17) reviews, 50% or more of the evaluated interventions were multicomponent (three reviews had one third or more but less than 50% multicomponent; five did not specify). Multicomponent programs are programs that include more than one type of intervention for participants; for example, a program that includes both vocational training and life-skills education (also referred to as combined [versus single-focus] programs). Most reviews did not specify whether interventions were multilevel – that is, whether the interventions included activities not just for girls, but also worked with the girl's partner, household, school, community, or other actors and levels of the ecosystem that may influence her life.

Only two reviews provided any (minimal) information about core topics covered in curricula; this was limited to short descriptors such as "child marriage and harmful traditional practices" or "assertive communication."

The age of young people across reviews ranged from 6 to 35; all included the subset aged 15–19. See Figure 2 for the age ranges included in the 15 reviews for which there are data. Twelve reviews' studies included females ages 10–13. Four reviews' studies included females ages 25–29.

Figure 2. Age range of participants in studies included in 15* reviews



* Two reviews did not specify the age of the adolescents in their studies.

The darker the colour, the more studies focused on that particular age. Out of 15 reviews that provided an age range: Ages 10 – 13 were covered in 12 reviews; age 14 was covered in 13 reviews; ages 15–19 were covered in 15 reviews; age 20 was covered in 10 reviews; ages 21–22 were covered in 9 reviews; ages 23–24 were covered in 8 reviews; ages 25–29 covered in 4 reviews; one of the reviews went up to age 35, and one included participants starting at age 6.

In terms of sex, 14 reviews included studies of both female-only and mixed-sex programs (three did not provide information). Some reviews (e.g., Dickson & Bangpan, 2012, and Gibbs et al., 2017) included mostly female-only studies, and others (e.g., Bakrania et al., 2018, and Martin et al., 2019) had half or more studies that evaluated co-ed programs. One review focused on HIV-vulnerable youth, orphans, and vulnerable children (Lee et al., 2020). All others covered girls, adolescents, young women, youth, and young people, though some of these included studies with orphans and vulnerable children (OVCs) as well. Three reviews gave a more detailed breakdown of participants in their studies (Table 3).

Table 3. Reviews that noted some of the diversity of adolescent girls in their studies

Participant characteristics	Marcus et al., 2017 (N=44 programs)	Stavropoulou, 2018 (N=57 programs)	Temin and Heck, 2020 (N=30 programs)
Rural/urban	17 rural 13 urban	“More than one-third”: rural “Considerable number”: both	14 rural 9 urban 7 both
Schooling	8 out of school	“Nearly one-third explicitly targeted out-of-school girls”	11 in school 9 out of school 8 both
Marital Status	8 married 9 unmarried (of which 6 open to both)	10 “also included married adolescent girls”	16 unmarried 2 married 6 both

Ten of the reviews included quantitative data (vote counting, effect sizes, or enough detail for us to vote count) summarizing the effects of interventions on economic, empowerment, SRH or violence outcomes (see Table 4).

Table 4. Number of studies included in 10 reviews

Review	Number of studies included
Chinen, M., et al., 2017	35
Dickson, K., and Bangpan, M., 2012	18
Gibbs, A., et al., 2012	8 (9)*
Gibbs, A., et al., 2017	14 (45)*
Hindin, M., et al. 2016	21
Kluve, J., et al., 2017	48 (113)*
Lee, N., et al., 2020	7 (16)*
Marcus, R., et al., 2017	63
Temin, M., and Heck, C., 2020	30
Tripney, J., et al., 2013	26
Total	270

* We include in our analysis the subset of studies with data on girls in LMICs; total number of studies in review noted in parentheses.²

Synthesis of Findings

Figure 3 presents the synthesized results of 10 reviews (270 studies). Eight reviews covering 177 studies examined economic interventions such as vocational training, financial education, and youth employment programs (Chinen et al., 2017; Dickson & Bangpan, 2012; Gibbs et al., 2012; Gibbs et al., 2017; Hindin et al., 2016; Kluve et al., 2017; Lee et al., 2020; Tripney et al., 2013). Five reviews covering 89 studies assessed combined interventions – i.e., a financial component plus another component such as life skills or SRH education (Chinen et al., 2017; Dickson & Bangpan, 2012; Gibbs et al., 2012; Hindin et al., 2016; Lee et al., 2020). Two reviews covering 93 studies examined evaluations of girls' empowerment groups (Marcus et al., 2017, Temin & Heck, 2020). With the exception of livelihoods training plus life skills interventions, which are examined in three reviews, vocational training (examined in two reviews), educational incentives (examined in two reviews), and girls' groups (examined in two reviews), the evidence rankings for most intervention–outcome pairings are based on one review, and, in most cases, on a subset of studies covered in the review (for example, because not all of the studies in the review examined the outcome).

² Gibbs, 2012: overall N=9; we exclude the women-only study among female sex workers (n=8); Gibbs, 2017: overall N=45; we focus only on studies which included adolescent girls and young women (AGYW) (n=14); Kluve, 2017: overall N=113; we focus only on results found for LMIC (n=48); Lee, 2020: overall N=16; we focus only on studies with disaggregated results for girls (n=7).

Overall, there was not enough evidence to classify any of the examined interventions as clearly “effective.” None of the reviews found negative/harmful findings, nor did any intervention approaches appear to be trending negative, although this could be because no negative effects were found or because negative effects were not reported. Most intervention–outcome pairings were unknown; that is, they were not examined by reviews. This could be because the questions were outside the scope of the review, or because few or no studies evaluated the impact of a particular intervention on an outcome.

Below we examine subsets of the interventions: economic, combined, and girls' groups. We note that these are not necessarily mutually exclusive; for example, some of the evaluated programs in the reviews that looked at combined interventions were group based. Thus, some studies in the reviews of combined interventions may also appear in the reviews of girls' groups, providing a different lens on the evidence. We also look across the body of reviews to explore the evidence on cross-cutting intervention approaches and elements, such as multicomponent programs, the role of group solidarity and networks, participatory learning and life skills, and critical consciousness of gender, and what is known about pooled savings and access to markets in programming for adolescent girls.

Economic Interventions (8 reviews)

The evaluations included in these reviews focused on economic programs such as vocational training, business training, on-the-job training such as internships, and entrepreneurship promotion/business development (including microfinance). While the predominant, and often only, components were economic skills building, some also included life skills (15% of programs in Tripney et al., 56% of vocational training programs in Chinen et al., 31% of business training in Chinen et al., and unknown percent in Kluve et al.) or combined economic interventions such as vocational training and internships (Chinen et al. 67%, Tripney et al. 45%).

Of those that specified duration, most reviews noted that most programs were less than 6 months long (Chinen et al., Tripney et al., Lee, et al.). Though it was difficult to tell from the descriptions in some reviews, it seems that these programs were mainly classroom based, not group based. While we did not search for cash transfers, four reviews (Dickson & Bangpan, 2012; Hindin et al., 2016; Gibbs et al., 2012; Gibbs et al., 2017) included financial incentives/support for school attendance. These were mostly conditional cash transfers and unconditional cash transfers, as well as scholarships and uniforms. Almost all of these were single-component, and none appeared to be group based.

Reviews of economic-focused interventions such as vocational training focused almost solely on economic outcomes (Chinen et al., 2017). These reviews suggest that **two program approaches – vocational training and business training, alone and in combination with other interventions such as internships – are promising for increased income, employment, and entrepreneurship outcomes** (see Table 5). These “promising” approaches mostly did not reach the rank of “effective” because the effect sizes were relatively small (i.e., meta-analyses found SMDs less than 0.20). Furthermore, while the studies included in the vocational training analyses were all within our age range, the results for business training

should be interpreted with caution; those meta-analyses did not disaggregate for age, and while it appears that at least a third of the studies included in the analyses were among young women, it may be that the results would be different if conducted exclusively among girls and young women.

Table 5. Evidence for “Promising” Economic Interventions*

	Formal Employment	Entrepreneurship	Income / Profit	Hours Worked
Vocational training	1 meta-analysis based on 5 studies, OR 1.10	<i>No reviews identified</i>	3 meta-analyses: <ul style="list-style-type: none"> ▪ 2 meta-analyses for earnings based on 8 studies each, SMD 0.11, effect size 0.14; ▪ 1 meta-analysis for self-employment earnings based on 2 studies, not significant 	1 meta-analysis based on 4 studies, effect size 0.16
Vocational training + internships	<i>No reviews identified</i>	<i>No reviews identified</i>	1 meta-analysis based on 3 studies, SMD 0.18	<i>No reviews identified</i>
Business training	<i>No reviews identified</i>	1 meta-analysis based on 3 studies, OR 3.04	1 meta-analysis based on 9 studies, SMD 0.14	<i>No reviews identified</i>
Business training + cash transfers	<i>No reviews identified</i>	<i>No reviews identified</i>	1 meta-analysis based on 4 studies, SMD 0.10	<i>No reviews identified</i>

* Excludes interventions of incentives/support for school attendance

The effect of **savings for girls’ outcomes is not well studied**, with only one review exploring savings as an intervention and finding only one study that tested the effects of savings on financial literacy. Of the reviews that also included economic support for education (e.g., CCTs), these did not assess economic or empowerment outcomes, but did measure impact on SRH/HIV and education, with promising results.

Combined Interventions (5 reviews)

Programs in this category included variations of life skills or gender transformative training plus an economic component. Four reviews also included programs that provided health education or SRH/HIV services. On the economic side, components included financial education/literacy, vocational or business training, income generating skills, savings, and micro-loans/grants. All or almost all³ programs in four of five reviews were group-based programs (the fifth review did not specify). Duration ranged from 40 hours to 2–3 years.

Reviews of such multicomponent programs documented promising interventions for economic and some SRH/HIV outcomes: Specifically, **programs that combine livelihoods or vocational training with life skills were promising for increased income** (based on two

³ In Dickson & Bangpan’s eight livelihood studies, six are group based and two may be, but it is unclear.

reviews: one meta-analysis of 5 studies, SMD 0.14, and one systematic review which found that two of three studies had significant effects) **and contraceptive use** (based on one systematic review which found that three of three studies had significant effects); and **financial education plus SRH education plus “self-efficacy support” was promising for improving HIV-related indicators** (based on one systematic review which found that three of three studies had significant effects, though for two of the three studies the outcomes were knowledge indicators).

Two systematic reviews in this category assessed empowerment outcomes, all of which ranked as “more research needed” due to the small number of studies that assessed these intervention–outcome pairings. One systematic review found that financial education plus SRH education plus “self-efficacy support” programs had significant effects on self-efficacy, but it was based on data from only two studies. Another systematic review found that programs that combine livelihoods or vocational training with life skills had significant effects on time use (based on two of two studies with four of six effects, so more research is needed) and mixed effects on mobility (based on one of two studies with one of two effects, so more research is needed).

Girls' Groups (2 reviews)

Two reviews, neither of them systematic, looked exclusively (Temin & Heck, 2020) or predominantly (Marcus et al., 2017) at the effects of girls' groups. Most interventions (Marcus et al.) or all interventions (Temin and Heck) were community based, and most were multicomponent programs, combining two or more elements such as life skills, economic-related programming, access to or quality of health services, recreational activities (sports, games), citizenship/legal rights, gender norms/rights, nutrition, education, GBV, and others. Most (26 of 30, Temin and Heck) or all (Marcus et al.) included life skills education. The authors found that economic components were included in at least half of the reviewed programs. In the community-based girls' groups, 17 out of 30 programs (57%) included economic elements (Temin and Heck). Marcus and colleagues examined the type of economic intervention and found that 52% (17 out of 33 of the community, group-based programs) included financial literacy, 45% (15 out of 33) included vocational training, and 42% (14 out of 33) included savings and loans. The relative emphasis of components or curricular content was not specified.

Duration was only reported by Temin and Heck, who found that groups typically met weekly or more (17 of 21 reporting) for 1–3 hours (15 of 16 reporting), 14 had a duration of 1 year or less, and 10 lasted longer than a year.

Effects of the economic components could not be disentangled by the reviewers. Nonetheless, compared to reviews of economic program approaches and to reviews of combined approaches, a far broader range of outcomes (37) were examined between the two reviews, including economic, empowerment, gender-related, SRH/HIV, GBV, and other outcomes. We find that the effects of girls' groups were **promising** for the following outcomes (vote counts for Temin and Heck and Marcus et al., respectively)

- **Employment** (based on five of six studies/effects and 10 of 11 studies significant in the expected direction)

- **Self-efficacy** (nine of 10 studies/effects and 10 of 12 studies)
- **Gender attitudes** (18 of 25 studies/effects, 20 of 29 studies)
- **SRH/HIV knowledge** (22 of 35 studies/effects and 28 of 31 studies)

The other outcomes assessed (n=33) had insufficient numbers of studies or effects, mixed results, or null results, and require further research, such as girls' groups' effects on decision making (just one review looked at this outcome, with three out of six studies positive), or savings (with contradictory findings for one of four effects [Temin and Heck] and 11 of 14 studies (Marcus et al.)). We note that among these "more research needed" intervention–outcome pairings, empowerment outcomes tended to be more positive and SRH/HIV and GBV outcomes tended to be more equivocal.

Multicomponent Programs

Looking at all 17 reviews, we identified four reviews that tried to compare multicomponent programs with single component programs. Chinen et al. (2017) and Tripney et al. (2013) looked across studies, comparing evaluations of programs that, for example, assessed stand-alone vocational training, with evaluations of programs that combined vocational training with (for example) internships. Haberland et al. (2018) and Lee et al. (2020) examined studies that were explicitly designed to compare multicomponent interventions with single-component versions. Both synthesis approaches seem to find mixed results. Chinen and colleagues found that adding cash transfers to business training did not increase effects on profit (though this analysis did not disaggregate by age and should be interpreted with caution), and adding life skills or internships to vocational training (all studies in analysis were with young women) did not increase the effect on employment, but adding life skills to vocational training did improve earnings. Tripney et al. found that adding internships to vocational training did not lead to significant improvement in paid employment or earnings, though this analysis was not disaggregated by gender, so we cannot conclude that this is necessarily true for girls.

Haberland and colleagues (2018) identified eight studies that compared a multicomponent arm to a single component arm. Five of these studies found that the multicomponent arm performed better, although most studies did not control for length of exposure. Without ensuring that both the single and the multicomponent versions of the program last for the same amount of time, an alternative explanation could be that participants in the multicomponent programs simply were exposed to an intervention for a longer period of time, and it is the longer exposure, not the multiple components, that lead to beneficial outcomes. The authors thus conclude that more research is warranted on whether multicomponent interventions are more effective than single component versions. Lee and colleagues did not find an added benefit to including savings with financial education in terms of financial literacy outcomes, though this was based on one study.

While not included in our review of reviews, we note two interesting evaluations that were designed explicitly to compare multicomponent versus single component programs (see box); both suggest that multicomponent programs do not necessarily work better than single

component ones, and that the questions of which components matter for which outcomes require additional research.

Multicomponent vs. Single Component – Case Examples

Buchmann et al., 2016 – Kishoree Kontha, Bangladesh

This four-arm RCT tests three different intervention approaches for adolescent girls:

1. A 6-month group-based empowerment program that included life skills as well as basic literacy, numeracy, communication skills, and reproductive health
2. Conditional incentive (cooking oil) to delay marriage (only girls permitted to collect the oil, not parents)
3. Combined empowerment program and conditional incentive
4. Control group

They found that:

- The life skills/empowerment arm significantly increased grade attainment and the likelihood of being in school.
- The conditional incentive increased age at marriage and schooling attainment.
- But the arm that **combined a financial incentive and life skills did not demonstrate any additional or separate effects on marriage or on schooling.**

Edmeades et al., 2018 – TESFA, Ethiopia

This quasi-experimental study examines two intervention approaches for married girls. Young women's groups, where participants received training on intra-household communication and conflict resolution, were separated into two intervention arms. Researchers equalized program hours of exposure across intervention arms, and both received community engagement. Additionally, the two intervention arms received, respectively:

1. Training using a SRH curriculum
2. Combined training on SRH and economic empowerment into a single combined curriculum
3. They found that:
 - The multicomponent arm (SRH plus economic program activities) did not perform definitively better than the single component arm (SRH only).
 - Rather, at least in the short term, the two program variations resulted in somewhat different outcomes – smaller effects across a broader range of outcomes (including economic indicators) for the multicomponent arm and larger gains across a narrower range of (SRH) outcomes for the single component arm.

The intervention demonstrated “broad program impact, but little evidence of a synergistic and mutually reinforcing relationship between the two program elements.” Rather, results reflected the content, with a broader range of outcomes affected (but smaller effect sizes) for the multicomponent arm, and a narrower range of outcomes (but larger effect sizes) for the more focused intervention.

Selected Program Features and Implementation Approaches

Drawing on the 17 reviews as well as selected additional studies, we explored how selected program elements – pooling savings and sharing risk, group solidarity and networks, participatory learning and life skills, critical consciousness of gender, and access to markets and services – operate in girls' groups.⁴ Three of the five elements are central to community-based girls' groups or safe spaces programming: Girls' groups, led by mentors, are among one of the more widely used platforms for girls' programming. Participatory learning and life skills are often standard in girls' groups. And fostering development of a critical consciousness of gender inequality is central in the theories of change of many (though certainly not all) programs. In contrast, pooling savings and sharing risk is less common among girls' groups, perhaps appropriately so. Instead, girls' groups that include savings typically facilitate girls' own savings accounts and seek to foster a culture of savings, planning, and budgeting. Access to markets does not appear to be a prominent feature of girls' groups and is an area in need of exploration for programs designed to improve livelihoods opportunities. Service linkages, though predominantly to health services, are more common.

In terms of the evidence of the role of these five elements, either as program features or pathways to outcomes, we either found a lack of research to date or mixed results. Specifically, while Stavropoulou (2018) attributes benefits to **savings** in the report's narrative synthesis, neither Chakravarty et al. (2017) nor Lee et al. (2020) find sufficient evidence to conclude whether savings improve girls' outcomes. None of the reviews quantitatively isolated effects of **group solidarity or networks** on girls, though Chakravarty et al. find insufficient evidence for peer learning and network building to reduce constraints to young women's employment. And Diaz-Martin and colleagues suggest, based on one study (Ashraf et al., 2018, profiled in box below), that group meetings alone, even without additional programming, may offer minor benefits to girls. We note that the duration of this field experiment was quite short (six 2-hour sessions), perhaps not allowing group dynamics, or their benefits, to fully develop. No reviews addressed **participatory learning**, but two reviews found the following about **life skills training, which may be, but is not always, participatory**: A systematic review and meta-analysis assessed adding life skills to vocational training, finding that it did not increase effects on employment, but did increase effects on earnings (Chinen et al., 2017). Another review (not systematic) concluded that adolescent group programs regularly led to improvements in economic and/or education outcomes, and the authors attributed that effect to improvements in girls' soft and life skills, though because most were part of multicomponent programs, disentangling cause is difficult (Diaz-Martin et al., 2020). No reviews addressed **critical consciousness**. The closest they came was in Chinen et al., which found that the impact of vocational training on employment and earnings was larger for programs that included a gender focus, compared to programs that did not, and that business training programs with the

⁴ Examining additional program characteristics and approaches was beyond the scope of this review. These elements were selected to reflect the Gates Foundation's strategy, which considers five elements – 1) pooling savings and sharing risks, 2) group solidarity and networks, 3) participatory learning and life skills, 4) critical consciousness of gender, and 5) access to markets and services – as critical for effective women's group programs (<https://www2.gatesfoundation.org/equal-is-greater/accelerators/>).

strongest gender focus had the largest effect on profits (this analysis for business training did not disaggregate by age and should be interpreted with caution). We note that similar findings have been found for sexuality education and SRH outcomes such as pregnancy and STIs: programs that foster critical thinking about gender and power tend to be more effective (Haberland, 2015). Last, none of the reviews assessed **access to markets**. The closest to this was Chinen et al., which found that adding internships to vocational training did not increase effects on employment but did increase earnings.

Results of recent RCTs that have come out after most of the reviews were completed examined one or more of these elements in the context of group-based interventions for girls and young women. Specifically, they explored the effects of groups themselves, life skills education, and critical consciousness (see box below).

Life Skills, Groups, and Critical Consciousness – Case Examples

Bandiera et al., 2018; Bandiera et al., 2020 – ELA, Uganda

This RCT of ELA, a group-based empowerment program for girls and young women aged 14–20, compares an empowerment program that combines life skills and vocational training with a control group.

They found that ELA demonstrated large, significant effects, compared to control communities:

- Girls in treatment communities:
 - Were more likely to engage in income-generating activities, and had larger monthly consumption expenditures
 - Had lower rates of marriage and of childbearing
 - Were more likely to report condom use and less likely to report unwanted sex
- Girls in treatment communities who had previously dropped out of school were more likely to re-enroll
- Authors found ELA “to be highly cost effective over the four-year evaluation horizon” at \$17.90 per eligible girl.

Ashraf et al., 2018 – Negotiation Skills, Zambia

This RCT among eighth grade girls compared two interventions and a control group:

1. A negotiation group in which female coaches trained groups of about 15–20 girls in negotiation and interpersonal communication;
2. A safe spaces–only group (“placebo”) in which girls participated in the same type of groups, led by the same female coaches, but instead of the negotiation curriculum, girls could play games, talk, or do homework;
3. Control group

The authors found the following:

- There were small but statistically significant effects for the safe spaces group (i.e., safe spaces on their own) on enrollment, though no effects were observed on absenteeism or academic skills.
- The negotiation training arm had stronger effects for most outcomes, and for their aggregate measure of human capital the effects are statistically significant. The authors conclude it is the negotiation and communication skills that girls gained, rather than other components (such as a mentor-led safe space, free lunch) that led to effects.
- Duration/exposure was relatively short (six 2-hour after-school sessions over the course of 2 weeks).

Amin et al., 2018; Amin & Makino, 2021; Amin et al., 2021; Misunas and Amin 2020 – BALIKA, Bangladesh

This RCT of BALIKA tested three program variations for girls 12–18. All three variations had mentored safe spaces for girls, the same life skills curriculum, and community engagement. Program arms varied as follows:

1. Education arm had tutoring support in mathematics and English
2. Livelihoods training – for example, in computers, basic paramedic skills, photography and other market needs
3. Gender and rights awareness, seeking to foster critical thinking about gender norms and power inequalities and build girls' agency and soft skills, including communication and critical thinking.
4. Control (no intervention)

The authors found the following:

- All three intervention arms significantly reduced child marriage by 25% – 30% compared to control villages.
- In addition to reductions in child marriage and other beneficial outcomes, the arm that took an empowerment approach also significantly increased girls' labor force participation and school retention. None of the other program variations had an impact on these outcomes unless they were targeting these outcomes intentionally (i.e., education outcomes for tutoring arm, and labor force participation for livelihoods arm).
- Latent class analysis found that at endline, girls in the gender and rights awareness arm had the highest probability of being in the most empowered “class” of four classes: 1) least empowered, 2) mobile and socially active, 3) socially progressive, 4) mobile, socially active, and socially progressive.

Limitations

We note several limitations to this review of reviews. First, this review of reviews was not systematic, and while we searched extensively, we may have missed reviews. Our findings for each program approach and outcome pairing are based on a relatively small number of reviews. Moreover, these reviews rest on an overlapping and somewhat thin (but growing) evidence base. While the reviews include some studies that only appear in one review, other studies appear in multiple reviews. Looking at the level of reviews (as this analysis does) may thus overestimate what we know, and overestimate the extent of the literature upon which conclusions are based. In terms of comprehensiveness, as noted above, our results are only reflective of the reviews that have been conducted, not the universe of economic empowerment interventions nor all possible outcomes. Finally, not all reviews were able to conduct meta-analyses, with some reviews instead using vote counting to synthesize their results. There are limitations to vote counting: each study is treated equally, which means that the magnitude of the effect and the sample are not considered. In addition, relying on vote counting may reduce statistical power relative to meta-analyses.

Discussion

While we suggest cautious interpretation given these limitations, we identified some promising interventions. These include, among the mostly economic (mostly not group based) interventions, vocational training and (with more caution because studies also included adult

women) business training, alone and in combination with other interventions such as internships and life skills. These interventions are promising for increased income, employment, and entrepreneurship outcomes. Among combined interventions, programs that combine livelihoods or vocational training with life skills are promising for increased income and contraceptive use; and financial education plus SRH education plus “self-efficacy support” is promising for improving HIV-related indicators (though for two of the three studies this is based on, the outcomes are knowledge indicators). For girls’ groups, promising effects were found for employment, self-efficacy, gender attitudes, and SRH/HIV knowledge.

Evidence Gaps

The evidence gaps illuminated by this review are extensive. In addition to a generally nascent but growing body of evidence, we note the following:

Groups

No reviews looked at group dynamics between members, such as cohesion or member mobilization. Only one review (Diaz-Martin et al., 2020) attempted to isolate effects of the group itself, but the review found only one study that examined the role of a girls’ group explicitly. We note that the relatively short exposure adolescent girls had to the group (six 2-hour sessions) may not have been sufficient to fully develop group dynamics or to generate significant benefits from group participation.

Multilevel Interventions

While multilevel programs are common – for example, Marcus et al. (2017) note that half the programs (22 of 44) also directed activities at other system levels, such as communities, the home, or partners – we find that few reviews explored this. Only one review quantitatively examined the added value of multilevel programs (Haberland et al., 2018), finding insufficient evidence at the time to conclude whether multilevel programs are more effective. An evidence gap map by UNICEF-Innocenti (Bakrania et al., 2018), looking at programs aiming to improve protection, participation, and livelihoods outcomes, found more studies of interventions directed towards individuals and households, and fewer studies on interventions operating at the group and community level (such as safe spaces) or policy and institutional level.

Isolating Effects of Different Program Components Alone and in Combination

Four reviews tried to quantitatively isolate the distinct contribution of specific program components, but most authors noted that because programs had multiple components, it was not possible to determine which component led to effect(s). Multiple authors recommended examining the distinct contribution of individual program components. We note that evaluations need to be designed to do so from the start, and that sample sizes of different treatment arms must be powered to examine such differences. Overall, more research is needed to determine whether, and for what outcomes, multicomponent programs provide additional benefits over single component programs.

Five Selected Program Elements

The effect of **savings** is not clear; nor is it clear what format for savings interventions is best, nor whether these answers vary by age. Only one review tried to assess whether **groups** themselves contribute to beneficial outcomes by leveraging interactions between members, but it found only one study that tested this explicitly. **Life skills** were ill defined and included a mix of topics, leaving open the question of which topics are key. **Participatory pedagogies** were not explored by the reviews, leaving open the question of whether it is what or how facilitators teach that drives outcomes. **Critical consciousness** was not included in these reviews, and it remains unknown whether it is fostered by groups and whether it contributes to outcomes (no standardized measurement instruments are yet available). The literature on adult women is similarly sparse. In a mixed-methods systematic review, Gram and colleagues (2019) examined the effect of women's groups on health outcomes, including critical consciousness as a "mediating capacity." While they found qualitative studies on critical consciousness (mostly arguing that it is a contributor to social and behavioural change), they found no quantitative studies focused on critical consciousness, and conclude that more research is needed. Little to nothing exists in these reviews regarding girls' and young women's **access to the market**, leaving open the questions of whether this can improve economic and empowerment outcomes for girls and young women and how to best facilitate such access.

Participants

No reviews looked at, for example, what works better for younger versus older girls/young women, for rural versus urban girls, or for more marginalized populations.

Program Length, Dose, Saturation

Few reviews examined differential impact of different program duration and intensity, or different saturation levels of a program across the target population. Haberland et al. (2018) found that program exposure improved effectiveness, but selection bias was an issue with a number of studies. They found no studies that tested variation in saturation. Marcus et al. (2017) found that more intense participation increased impact, but the review does not address selection bias. The authors found less evidence regarding program length, with both a relatively short (12-week) program and relatively long (1 year) program demonstrating effects. Temin and Heck (2020) found that less than half of programs reported participation, but that among those that do, the authors similarly found no clear pattern regarding program length/lifespan. Several authors noted this evidence gap.

Cost and Cost Effectiveness

No reviews included cost or cost effectiveness data. Those reviews that highlighted this gap noted that few evaluations address this.

Scale

Seven reviews noted that research to inform scale (e.g., cost, most efficient design, duration) is needed.

Implications and Recommendations for Programs to Advance Adolescent Girls' and Young Women's Economic Empowerment

These emerging findings and persistent gaps in the literature have various implications for programs. Girls' groups have shown promise for improving employment, self-efficacy, gender attitudes, and SRH/HIV knowledge outcomes. Typically composed of intentionally designed girls-only groups, they are characterized by mentor-led safe spaces; include interactive, learner-centred life skills education that addresses gender and power; and aim to build girls' social, health, economic, and cognitive assets and civic engagement. Similarly, combined approaches that partner promising economic-focused interventions such as vocational training with empowerment-based life skills in the context of groups have shown promise in affecting economic and SRH outcomes. Though there is no standard for what makes up life skills education, programs that foster critical thinking about gender and power tend to be more effective for SRH outcomes (Haberland, 2015) and vocational training programs tend to be more effective for some economic outcomes when they have a stronger gender focus and when they are combined with life skills (Chinen et al., 2017).

While the evidence base is promising, more research demonstrating significant and meaningful impact is required to deem programs effective. Moreover, there are multiple program areas and aspects that remain understudied where program innovation (and evaluation) are recommended. For example, reviews did not cover access to markets – interventions need a clear theory of change or approach that takes into account existing economic markets and does so with a strong equity lens given disparities in access. Further, we encourage programs and researchers to document and report implementation variables such as dose, duration, saturation, participant characteristics, program characteristics, program content, group characteristics, and cost to contribute to answering design, efficiency, and scalability questions.

Research Recommendations to Advance Adolescent Girls' and Young Women's Economic Empowerment

The extensive evidence gaps outline an extensive scope for research. Some of these recommendations can be explored through secondary data analysis or systematic reviews; others require original, rigorous research.

Program Content

At the top of our list of urgent research questions is the need to both isolate the effects of program components and combinations and determine whether specific components contribute to the program's impact. This would for example include studies of girls' groups that compare group models with and without an economic component. Similarly, no reviews assessed the added benefit of working at multiple levels of system. Do group-based economic empowerment programs for girls work better if they are coupled with (for example) gender norms change efforts at the community level? Or if they address household economic strain? Or bring market opportunities to girls?

Research is still needed on the effects of some economic components – for example, the effects of savings and financial literacy, especially their impact on “hard” outcomes such as girls’ and young women’s income or consumption. Though meta-analyses of studies that also include older women are encouraging, more research is needed on the effects of business training on adolescent girls and young women. Further, what is the role of cash (cash transfers, micro-grants) in girls’ economic empowerment? Does delivery via mobile money accounts improve outcomes? Finally, the content of life skills, and its key core topics, needs rigorous examination. For example, how do group-based economic empowerment programs that include gender-blind soft skills compare with a version that includes soft skills that foster critical consciousness about gender? Or is it how facilitators teach content, as much as what they teach, that is key?

Pathways of Change

Understanding the pathways through which interventions may have their effect can contribute to more robust theories of change and intervention design. Lacking in this regard are rigorous evaluations to assess mediating effects of group-level dynamics such as mobilization, support, or cohesion, for example – as well as quantitative evidence of hypothesized mediating variables such as critical consciousness of gender. If there are sufficient studies, a systematic review exploring pathways by which economic interventions impact health and other social outcomes is warranted.

Implementation

How programs are implemented and designed to bring the greatest benefits to the most vulnerable girls and young women requires additional implementation research. For example, we must tease apart the question of “for whom?” In other words, what economic interventions work best for younger adolescent girls’ groups versus those for older adolescents or young women? For girls in rural versus urban settings? For more marginalized young women? Questions regarding optimal dose and coverage are also rarely explicitly explored, and need additional research. For example, studies that test variations in program intensity/duration and saturation to identify the most efficient design can also inform programming at scale. Similarly, cost-effectiveness studies to identify the most cost-effective approaches are also needed and would inform decisions about scale.

Outcomes and Methods

Many of the reviews focused quite narrowly on economic outcomes. Whether this is a reflection of their scope or the literature, we recommend expanding outcomes to include a stronger gender perspective – for example, by including measures of power in relationships, household investments in girls’ human capital, women in business leadership roles, improved empowerment measures, and pay equity, as well as by differentiating economic outcomes by gender (i.e., examining income and asset ownership separately for men and women). Also of importance is the question of whether economic empowerment can impact other gender-related outcomes such as child marriage, investment in human capital (e.g., education), and longer term outcomes such as decision making in the household, IPV and future income? On the methodological side, in the case of multiple intervention arms, we reiterate the need for investment to ensure that the study arms have sufficient statistical power to distinguish differences between intervention arms (not just in comparison to the control/comparison group).

Finally, there is measurement work that could contribute substantially to advancing the field. A particular need is to figure out how to measure critical consciousness of gender norms and equality among adolescent girls and young women.

In conclusion, there are several promising approaches to fostering adolescent girls' and young women's economic empowerment. While additional research is required to identify which program components, combination of components, and core topics are effective in economically empowering adolescent girls and young women, we need to better understand what works for whom and in what settings.

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