Interventions to increase youth employment in sub-Saharan Africa: a mixed method systematic review

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Abbreviations

AfDB	African Development Bank
AoAV	Action on Armed Violence
BRN	Big Results Now
BPY	Building Potential of Youth
CBO	Community Based Organizations
CPC	Community Processing Centres
DCU	Donor Coordinating Units
DIC	District Implementation Committee
E4WAY	Empowerment for Women and Youth
EGM	Evidence and Gap Map
EPAG	Empowerment of Adolescent Girls and Young Women
EPWP	Expanded Public Works Programme
ETI	Employment Tax Incentive
EU	European Union
GEEL	Growth, Enterprise, Employment, and Livelihoods
ILO	International Labour Office
ISAL	Internal Savings and Lending Scheme
IYF	International Youth Foundation
JPYES	Joint Programme on Youth Employment in Somalia
MAWPEVAW	Men and women as partners to end violence against women
MOYA	Ministry of Youth Affairs
MSME	Micro, Small and Medium Enterprises
NEET	Not in Employment, Education or Training
NGO	Non-Governmental Organization
NSC	National Steering Committee
NYVS	National Youth Volunteer Service
PIU	Project Implementing Unit
PSDG	Private Donor Group
RCT	Randomized controlled trial
RSS	Republic of South Sudan

SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goal
SMD	Standardised Mean Difference
SRHR	Sexual Reproductive Health And Rights
SSA	Sub-Saharan Africa
TVET	Technical, Vocational and Educational Training
TWG	Technical Working Group
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS (UNAIDS)
UNCDF	United Nations Capital Development Fund
UNESCO	United Nations Education, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
VTC	Vocational Training Centre
WINGS	Women's Income Generating Support
YEEP	Youth Employment and Empowerment Programme
YEF	Youth Entrepreneurship Facility
YEP	Youth Employment Project
YESD	Youth Employment for Sustainable Development
YES-JUMP	Youth Employment Support - Jobs for the Unemployed and Marginalised Young People
YLA	Youth Leadership for Agriculture
YS	YouthStart
YVRDP	Youth Volunteers Rebuilding Darfur Project

Executive Summary

Background and introduction

Around 72 million of young people across Africa – that is over one-quarter – are not in either formal or informal employment, education or training (NEET). Of these two-thirds are young women. The importance of youth employment is recognized in the Sustainable Development Goals (SDGs) and many regional and national initiatives.

This report summarises the evidence from evaluations of youth employment interventions in sub-Saharan Africa. The studies were identified from the evidence and gap map (EGM) of youth employment interventions, which has been published separately (Apunyo et al., forthcoming).

Overview of youth employment interventions

Youth employment interventions may be broadly classified under three headings, each corresponding to a different constraint which is being addressed and so a different causal mechanism for how the intervention is expected to work. These are supply-side (employability), demand-side, and matching.

1. **Supply-side interventions** increase the quantity and quality of the youth labour force by increasing the likelihood that the young person will gain a decent job.
2. **Demand-side interventions** increase the demand for young people's labour, the assumption being that it is a deficit in demand which results in youth being un- and underemployed.
3. **Matching interventions** bring together youth and employers, reducing labour market friction from lack of knowledge of employers about potential employees and *vice versa*.

There are several counteracting causal mechanisms which may fully or partially offset the effects of interventions. These theories concern fungibility, deadweight loss, and substitution.

In practice a single intervention may operate more than one causal mechanism. For example, an apprenticeship, which is usually seen as a supply-side training intervention, will involve also an element of matching employers to interns, and during the apprenticeship employers learn what the young person has to offer which may lead to an offer of employment (demand). In sub-Saharan Africa youth employment interventions very commonly support young people to start their own business. Although this is skills training, it is classified as demand as in setting up a business the young person creates a demand for their own labour and that of other young people.

Furthermore, most youth employment interventions are multi-component measures that combine different activities, such as business skills training and finance, within a single project.

Key design decisions for interventions include:

- single or multicomponent intervention;
- whether to charge or pay participants;
- intervention intensity (duration, frequency of sessions, and number of sessions);
- setting and location;
- governance, i.e. assignment of responsibility for implementation.

Funding and staffing

Issues with funding and staffing are commonly reported in the evaluations. Funding delays cause project start up delays and so components get cancelled or curtailed. Complicated donor procurement systems, most

notably the need to get expenditures approved by headquarters, are frequently blamed for delays. Delayed or inadequate funding is a frequent cause of lack of staff. But there are also issues of poor-quality staff – especially in post-conflict settings – such as vocational trainers who have not practiced the skills they teach. Staffing issues may also affect donors, especially if projects are managed remotely.

Eligibility, targeting and recruitment

Interventions need participants. Questions such as who is eligible, how individuals are identified (targeted), and how they are recruited are an important part of intervention design. But these aspects are poorly covered in many evaluations.

Young people are the main eligible population for youth employment interventions, with varying definitions of being young between countries and programmes. But there may be other eligibility criteria. Education is a common criterion – usually with interventions being open to high school and university graduates, though occasionally also for the less educated. Other eligibility criteria include employment status, sex, nationality, disability, displaced populations and ex-combatants.

The most common forms of targeting are geographical, indicator targeting by youth characteristics, community nominations, and self-targeting. Geographical targeting commonly goes to the poorest districts. But youth employment interventions are disproportionately set in urban areas, especially the capital, creating an urban bias which means many of the most disadvantaged are not reached. Public works projects are one exception as these are most usually implemented in rural areas, and they self-target poorer people by paying low wages.

Targeting performance is little reported with the exception of gender. Some projects report success in achieving the target level of female participation, which is most usually 50%. This is ascribed to gender sensitive design features such as safe transport, appropriate timings, and creche or other childcare arrangements. However, many projects report less success with female participation. This is partly because courses are offered in male-dominated professions, and due to the fact that women are reluctant to take on certain tasks - with gender awareness campaigns apparently doing little to change social norms.

Recruitment often varies between donor projects and researcher-organized trials. The latter often use sample survey-based recruitment which would not be feasible at scale, and so undermines the scalability of the intervention being studied and external validity of the study findings. Donor projects are more likely to work with existing institutions and rely on their outreach channels, which include traditional and social media, mailing lists, and community meetings. Alternatively, they may work with existing groups such as youth groups and co-operatives.

Participation and retention

Not all of those invited to take part in an intervention participate, and those who participate may drop out. The total number of beneficiaries is often a small percentage of the planned amount, participation rates varying from exceeding targets to just a few percent of the eligible population. In a study of a project working with girls' clubs in Uganda, 59% of girls in the treatment communities had heard of the clubs, 21% had attended at least one club meeting, and just 13% of girls continued to attend club meetings (Bandiera at al., 2012: Table 2). This drop off in participation is captured in the funnel of attrition, which also illustrates the finding that effect sizes are generally smaller as we move along the causal chain.

Why young people choose to take part in interventions is not addressed in the evaluations. Young people are seen as passive recipients, rather than people with their own agency making choices to optimize their livelihood strategy.

Common barriers to participation are reported as being:

- lack of awareness of the intervention;
- lack of interest in the offer, especially agricultural projects;
- location, i.e. the most disadvantaged youth are in remote areas but projects are often in towns or cities;
- the lack of a gender-friendly environment.

Factors facilitating participation are

- using existing institutions providing access to their networks and their established relationships with young people;
- providing incentives, such as stipends or transport subsidies;
- supporting female participation through creches and safe transport.

Implementation issues

We also assess the barriers and facilitators of successful implementation. Commonly reported barriers to implementation are:

- poor coordination and communication;
- poorly functioning project implementing units;
- lack of government commitment.

Facilitators supporting successful implementation are:

- government commitment and support;
- collaborations and partnerships;
- adequate and additional support.

The effectiveness of youth employment interventions

Overall, the results of our meta-analysis indicate that the impact of youth employment interventions on youth employment is low. On average an intervention increases the absolute level of employment by only 3 to 4%. This is a much lower figure than that suggested by outcome monitoring data in results frameworks, which fail to allow for what would have happened in the absence of the intervention. Least effective is technical and vocational training offered as a single component. Both business skills training and life skills training have larger effects. But largest effects come from interventions which combine different activities in a multicomponent interventions.

A very clear finding from our analysis is that multicomponent interventions are more effective than single component projects. On average multicomponent interventions increase employment by 9% compared to just 2% for single component. **The largest effects are found from combing training with finance or employment support, and especially from the three combined**.

As expected on account of the funnel of attrition, there are larger effects on skills outcomes than there are on employment outcomes. And there are on average lower effects on earnings, and no effects on psycho-social outcomes such as self-esteem.

The focus of youth employment interventions on self-employment in sub-Saharan Africa appears to be justified. There are large effects on starting a business (a 5% absolute increase) and a larger effect still on business performance. However, a note of caution is warranted as there are no studies of long-run effects, and other data show a high failure rate amongst firms. Over 50% of firms fail in the first 5 to 10 years.

Another factor influencing impact is the duration of the intervention. Longer interventions are more effective. But larger interventions are less effective, reflecting the difficulty in taking interventions to scale.

Qualitative findings cast light on the low average impact of youth employment interventions on employment. These include lack of access to finance for young entrepreneurs, cancelled activities and incomplete implementation, inappropriate or poor-quality training, and weak labour markets.

Sustainability

Sustainability may be measured directly by long-run studies or indirectly by assessing if the conditions for sustainability are met. There are few long-run studies of social and economic interventions in general, and none within the scope of the EGM. Two studies report sustained increases in employment in one case, and earnings in the other after two and four years respectively. But these are hardly long-run effects. So, we turn instead to the conditions for sustainability. These are: (i) technical - the knowledge and skills, as well as necessary equipment, are available to continue the activities; (ii) financial - funding is available to support the delivery of the activities; and (iii) institutional - delivery is within an organization's mandate, and within the organisation there is clear responsibility for delivery which is covered by the job descriptions of those responsible for delivery. The evidence with respect to each of these is mixed, with both positive and negative cases. Technical sustainability requires that those who will be expected to undertake activities in the future are responsible for them under the project. This is not always the case. Similarly, institutions expected to continue activities should be part of the delivery mechanism during the project – but this is not a sufficient condition, as even services, such as careers service in universities – may not get formally adopted. Financial sustainability is the weakest of the three conditions. Few interventions can be financially self-sustaining and governments are rarely willing to take on the additional burden. For all of these reasons, working with existing institutions is most likely to be sustainable.

Implications of study findings

The review has clear implications about what works and what doesn't. **What works is longer, multicomponent interventions which combine training with finance or employment support or both. What doesn't work are short interventions and technical and vocational education and training (TVET) alone**. **Reaching the most disadvantaged has proved challenging, and so needs more attention, including addressing urban bias**. Many of the implementation challenges are well known, but that does not mean that they should not be avoided. These challenges include insufficient funding, inadequate staffing, project delays (partly because of complicated procurement procedures) and coordination difficulties.

Implications of research consist of a set of recommendations related to conducting evaluations corresponding more closely to the interventions, and related design questions, of governments and NGOs in practice. Practical questions which are not addressed include understanding youth motivation for taking part in interventions or not, evaluation of different targeting and outreach mechanisms, and rigorous evaluation of the importance of certification. There are deficiencies in study design, implementation and reporting which undermine confidence in study findings.

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1 Introduction

1.1 The youth employment challenge

Around 72 million of young people across Africa – that is over one-quarter – are not in employment, education or training (NEET). Of these two-thirds are young women (Karkee and O'Higgins, 2023). This is despite the fact that most youth cannot afford not to work, so they are underemployed in low-productivity jobs rather than unemployed (ILO, 2024).

Key takeaways

One-quarter of young people in Africa are not in employment, education or training (NEET).

Youth employment is recognised as a central policy issue at international, regional and national levels.

This report summarises evidence from evaluations of youth employment interventions in sub-Saharan Africa.

The availability of work worsened globally during COVID-19. Employment since recovered elsewhere but not in sub-Saharan Africa (SSA) where the proportion of youth who are NEET continues to grow at nearly 3% a year (ILO, 2024).

The problem of youth employment has received attention in global, regional and national development policies and goals. At global level, Sustainable Development Goal (SDG) 8 addresses youth unemployment: "By 2020, substantially reduce the proportion of youth not in employment, education or training" (United Nations). In addition, the United Nations Youth Strategy has several priorities of which the third talks about promoting economic empowerment through decent work, by supporting young people's greater access to decent work and productive employment (United Nations).

Decent Jobs for Youth is a global initiative to scale up action and impact on youth employment in support of the 2030 Agenda for Sustainable Development. It is supported by a wide range of international development agencies and co-manages the knowledge platform Youth Foresight.

There are several initiatives at the regional level in sub-Saharan Africa:

- The African Union's *Youth Decade Plan of Action* focuses on five key priority areas of which the first two are education and skills development, and youth employment and entrepreneurship.

- The African Union also has a technical and vocational education and training (TVET) *Continental Strategy* which provides a framework for national strategies.

- The African Development Bank launched the *Jobs for Youth in Africa Strategy* in 2016 which aims to promote education and training, transformative jobs and a business environment conducive to entrepreneurial activities (i.e. youth entrepreneurship).

- Youth employment is also a key strategy area for the Mastercard Foundation. They support youth employment programmes for Africa with a goal to enable 30 million young people to secure dignified and fulfilling work by 2030 (Mastercard Foundation).

1.2 About this report

This report summarises the evidence from evaluations of youth employment interventions in sub-Saharan Africa. It addresses the following questions:

- What interventions are used to increase youth employment in sub-Saharan Africa?
- How are these interventions expected to work?
- How is eligible to take part in youth employment interventions? How are they targeted and recruited?
- What is the implementation experience of youth employment interventions?
- What is the effect of youth employment interventions on employment and other outcomes?
- Are the effects sustainable?

The studies included in this review were identified from the evidence and gap map (EGM) of youth employment interventions, which has been published separately (Apunyo et al., forthcoming). The EGM includes 1,023 evaluations, of which 594 are impact evaluations, 407 are process evaluations, and 31 are systematic evaluations. Of these, 212 evaluations present evidence from countries in sub-Saharan Africa.

Separate reports have been prepared for a quantitative synthesis and a qualitative synthesis of those evaluations. This mixed method review combines the findings of those two reports. These syntheses, and this report, are part of the Youth Employment in sub-Saharan Africa which, in addition to the EGM and evidence syntheses, has produced a What Works for Youth Employment in sub-Saharan Africa Toolkit, which is based on ten intervention-specific technical reports. The ten interventions are technical and vocational training, apprenticeships and internships, life skills training, business skills training, business mentoring, career guidance, digital interventions, public works and wage subsidies. The analysis from these technical reports also informs the contents of this report.

Chapter 2 provides an overview of youth employment interventions and how they are meant to work, followed by Chapter 3 which reviews evidence on the staffing and funding for youth employment interventions. The following two chapters deal with issues which are relatively neglected in many evaluations. That is, which young people are eligible for the intervention, and how they are identified (targeting) and recruited (Chapter 4), followed by discussion of participation rates and attrition (Chapter 5). The following chapters discuss implementation (Chapter 6), impact (Chapter 7), and sustainability (Chapter 8). Implications for policy and practice are given in Chapter 9. Technical matter is contained in the Annexes.

2. What are youth employment interventions and how are they meant to work?

2.1 Introduction

Interventions are undertaken to do something which would not happen in the absence of that intervention. Put another way, there is a binding constraint which needs to be addressed to achieve the desired outcome, in this case youth employment. This chapter presents a typology of youth employment interventions based on the different causal mechanisms through which they operate.

Key takeaways

Youth employment interventions work through three main causal mechanisms:

- supply (increasing employability),
- demand
- matching.

Increasing employability includes training and helping young people with job applications.

Demand includes public works, as well as private sector development and business skills training.

Matching includes career guidance, labour market information and events such as job fairs.

The majority of youth employment interventions are multicomponent, so may have different components addressing different causal mechanisms.

There are 'counter theories' concerning factors which may reduce the impact of youth employment interventions. These are: deadweight loss, substitution and displacement.

Important design decisions for youth employment interventions include:

- single or multicomponent
- whether and how much to pay participants, or provide as in-kind support
- duration and intensity (frequency and length of contact)
- setting, time and place for activities; and
- who implements the different activities.

The starting point for any theory of change is that the necessary inputs – money and staff – are provided, which allow project management and implementation to take place. Evaluation findings in this regard are discussed in Chapter 3. The next stage is the activities that are undertaken to identify and recruit young people to the intervention, which is discussed in Chapters 4 and 5. The next stage of the theory of change concerns the central causal mechanism for the intervention to which we now turn.

2.2 Which constraint does the intervention address? Main causal mechanisms

Youth employment interventions may be broadly classified under three headings, each corresponding to a different constraint which is being addressed and so a different causal mechanism for how the intervention is expected to work:

- **Supply-side interventions**, which can also be called measures increasing employability, increase the quantity and quality of the youth labour force by raising the likelihood that the young person will gain a decent job. Employability is addressed by providing skills required by employers, as well as support for the job search and application process. The most common skills provided are technical skills through vocational training, which are provided in over half of the interventions covered by the evaluations in the EGM. For example, the *National Employment Programme* in Rwanda supported 383 training centres across the country to train 10,000 youth by the time of the mid-term evaluation in "practical and market oriented" skills such as masonry, carpentry, tailoring, welding, and culinary art (Grey et al., 2017: pp.23-24).

  There will be underinvestment in training by the private sector because the training firm will not capture the full benefit of the training if the young person changes employer. Whilst young people might potentially borrow to finance their own training, paying back from the higher income received as a result of the training, capital markets do not exist in sub-Saharan Africa to provide such loans.

  The key assumptions for this causal mechanism to operate is that there is demand for youth labour, and that, in the case of skills development, the skills taught are appreciated by employees.

- **Demand-side interventions** increase the demand for young people's labour, the assumption being that it is a deficit in demand which results in youth being un- and underemployed. In developed countries, low demand may result from an economic downturn. But in developing countries, the issue is that the growth of the economy may be insufficient or of the wrong sort[1] to absorb new labour market entrants, so unemployment is particularly severe for young people. Youth unemployment in SSA is exacerbated by demographics – the slow demographic transition means that that the youth are a growing share of the population. The key assumption of demand-led approaches is that youth with the appropriate skills are available at the right time and place, and willing to work for the offered wage. Business skills training is classified under demand-side, but is also reliant on the supply-side assumption that there is sufficient demand in the economy for the goods and services provided.

- **Matching interventions** bring together youth and employers, reducing labour market friction from lack of knowledge of employers about potential employees and *vice versa*.[2] Matching may directly introduce employers to potential employees in job fairs, or guide young people to appropriate employment according to their aptitude and aspirations as in career guidance, or provide labour market information to both employers and young people to inform their choices. Such activities may lead youth to revise their job expectations to be more realistic.

In practice the classification between the three causal mechanisms is not so clear cut. For example, an apprenticeship, which is usually seen as a supply-side training intervention, will involve also an element of matching employers to interns, and during the apprenticeship employers learn what the young person has to offer which may lead to an offer of employment (i.e. labour demand). In addition, many interventions

[1] 'Jobless growth' is growth which does not generate new employment. Jobless growth sounds bad from an employment perspective, but it also implies higher productivity which is an important part of the development process. Labour productivity in sub-Saharan Africa is less than one-tenth that in developed countries (World Bank, 2020: p.148). Higher earnings will require higher productivity.

[2] In economic terminology, there is asymmetric information in which employers do not know the 'type' of potential employees (good worker or poor worker). Interventions which allow temporary work experience, such as a temporary wage subsidy, provide the opportunity for the employer to learn the employee's type.

combine these different elements even if they are labelled as a single component intervention. For example, a vocational training intervention (supply-side) may be combined with careers advice (matching) to inform the young person's choice of vocational course. And a public works programme (demand-side) can include skills training (supply-side) both for the workers and the contractors expected to undertake the works. Furthermore, as discussed below, most youth employment interventions are multi-component and therefore combine different activities, such as business skills training and finance in a single project.

This hybrid nature of interventions is captured by the triangle shown in Figure 2.1. The location of an intervention in the triangle reflects the extent to which it addresses the three main constraints - that is the principle causal mechanisms activated by the intervention. For example, life skills training and job fairs sit in the supply (employability) and matching apexes respectively as they work through a single causal mechanism. But apprenticeships and internships blend increasing employability with matching.

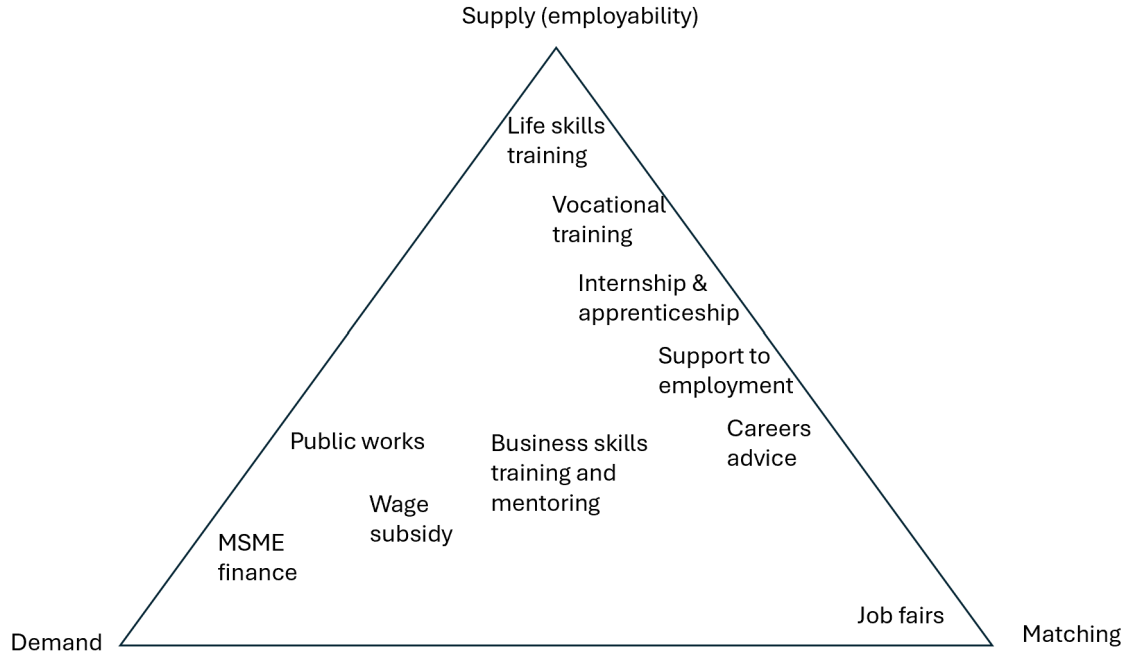
The most common intervention is vocational skills training, which is a component in 58% of the sub-Saharan African (SSA) studies included in the youth employment EGM.[3] This training provides youth with job-specific skills such as carpentry, hairdressing, and so on.

In the African context an additional challenge is posed by the lack of foundational skills amongst young people. Close to nine out ten children do not acquire basic literacy which undermines their capacity to learn effectively (Azevedo et al., 2021). Hence skills training often needs to provide literacy and maths training, too.

Alternatively, this training may be included under life skills training. Life skills training has become popular in recent years, often combined with other types of training. Life skills components were present in 10% of evaluated projects in SSA in the period 2005-2009,[4] rising to 24% by 2020-24. The rise of life skills training has been informed by research findings of the positive long-run effects of early child development interventions on labour market outcomes, with this effect being attributed to non-cognitive or social skills (Heckman et al., 2006). In practice life skills training covers a broad range of activities including interpersonal skills and support to job search such as interview techniques but also practical skills like financial literacy, as well as basic skills in literacy and numeracy.

[3] The study of Filmer and Fox (2014) reports that 20% of youth have had apprenticeships compared to just 4% who have vocational training. But the large majority of these are traditional apprenticeships which are not a subject of this study per se. But they are covered in evaluations of interventions which work with providers of traditional apprenticeships.
[4] The period 2000-2004 is omitted as there were only two studies from SSA in that period.

Figure 2.1 Typology of youth employment interventions



Note: MSME is micro, small and medium scale enterprise.
Source: Authors' own elaboration.

Whilst vocational skills training is a supply-side approach, other types of training tackle both supply and other constraints:

- **Business skills training** can be classified as both a demand-side and matching intervention (hence its location to the centre of the triangle) as in starting their own business the young person creates a demand for their own labour, and possibly that of other young people. There is also an element of matching, as the young person is matching themselves to their own business. This demand perspective is clear in the EU-supported *Youth Entrepreneurship Facility* in Uganda whose purpose was "to contribute to the creation of decent work for young Ugandans both as a means of self-employment and job creation for others" (Kintu, 2016: p.7). However, the ability of self-employment to create demand for labour will – like the success of employability interventions – depend on general market conditions. Nonetheless, business skills training is very common, being a component of just over 40% of interventions studied in the evaluations in the EGM.

- **Apprenticeships and internships** provide on-the-job training. But they also have an element of matching, both in the choice of placement, and because the employer learns about the young person during their placement which may lead to a job offer.

On the demand-side, **youth wage subsidies** increase the demand for youth labour. In addition, the period of employment allows the employer to learn more about the employee so there is also an element of matching, as well as on-the-job skills development for the young person. **Public works** will usually include some explicit training, as well as on-the-job skills development, and the general benefit of acquiring work experience. **Business finance** is the most demand-oriented of the interventions shown in the figure, though there may also be a skills development aspect to the requirement for young people to prepare a business plan.

Not shown in the figure, as there are very few relevant evaluations of these interventions focused on youth, are the demand-side interventions of regional economic development, value chain development, connection to markets and market information and general economic policies of trade, investment and taxation.

Matching interventions include **careers advice and guidance**, **careers days** and **job fairs**. Support to employment covers various activities. Some of these, such as identifying potential employers and assisting with applications, mainly work through the matching mechanism. But others, such as advice on CV preparation and interview techniques increase employability.

Counter theories

There are several counteracting causal mechanisms which may fully or partially offset the effects of interventions. The evaluation question to investigate the mechanism is one about additionality. Additionality may be concerned with three things: (i) is the intervention doing something that would not have been done in the absence of the intervention?; (ii) would the young people trained and employed not have received training or employment in the absence of the intervention?; and (iii) are those trained or employed displacing other young people who would otherwise have been trained or employed?

The lack of additionality of the first sort is fungibility. That is, if the project funds something that would anyway have been funded, funds are freed up to fund something else. The marginal impact on activities is not the same as that to which the funds are nominally tied. Empirical analysis routinely shows that aid is partially fungible both in aggregate and at sector level (see, for example, Kaya and Kaya, 2020, and Rana and Koch, 2022) – meaning that spending on youth employment interventions does not rise by the equivalent amount to development aid allocated to that purpose. However, none of the included studies consider this question.

The second question refers to deadweight costs which occur when the jobs 'created' by the intervention would have been created anyway, or the young person would have anyhow found another similar job (including self-employment).[5] It can also mean that a person who is trained would have found another training opportunity in the absence of the programme. It is because of this possibility that counterfactual impact evaluations are required to estimate the extent to which the employment created is additional. 'Results reporting' which simply reports the number of young people entering employment after the intervention does not take account of deadweight loss, and so over-estimates the effect of the intervention.

The likelihood of deadweight loss is increased by the practice of 'creaming', which refers to the situation in which the implementing agency recruits only the most promising young people even if they are meant to target more disadvantaged groups. Creaming increases the likelihood of deadweight loss as young people selected are also those who would most likely have succeeded without assistance. For example, the evaluation of a project in South Sudan reported that participants "are mostly elite urban youth" (Chiwara, 2012, p.33).

The employment effect may also not be fully additional if there is substitution. Substitution occurs when young people supported by the intervention are employed rather than other young people, so there is no net effect on total employment. This effect should be picked up in a counterfactual impact evaluation.

In addition to substitution there is also the possibility of displacement which occurs when jobs are lost in businesses which do not benefit from the intervention. Non-participating firms lay off workers because of the competitive advantage given to firms which do benefit. In principle impact evaluations could test for

[5] Crépon and Premand (2018) refer to this as 'windfall effects', that is an effect which may be claimed by the intervention but is not in fact attributable to it.

displacement as a negative spill-over, but in practice they do not. Indeed, very few of the included studies explicitly refer to any of these counter theories.

2.3 Main design features of youth employment interventions

This section discusses some of the key design choices for a youth employment intervention. Other design issues, such as targeting and outreach are discussed in subsequent chapters.

Multicomponent

Just over 70% of SSA evaluations in the EGM are of multicomponent interventions, that is interventions which combine components from more than one category. These may either be different components for different target groups, or multiple components for the same set of youth.

An example of the former is the *Youth Entrepreneurship Facility* in Uganda which conducted media activities to promote a culture of entrepreneurship, incorporating entrepreneurship education into the vocational curriculum, supporting innovative business ideas by youth, and financial literacy to facilitate access to finance (Kintu, 2016).

Examples of multiple interventions to the same group of youth are:

- The employment-oriented curriculum at a university in Rwanda which combined training in career-relevant skills, such as English language, technology and problem-solving skills along with support to employment such as networking and communicating with potential employers (Bier et al., 2019), and

- *Youth Map Uganda* which included skills training, a six-month internship, entrepreneurship training, mentoring, and support to job placement (Duggleby et al., 2015). Another 10% of studies have multiple components within an intervention category, i.e. combine different intervention sub-categories.

- A common combination are vocational skills and life skills, as in the Skills for Effective Entrepreneurship Development Project in Uganda (Chioda et al., 2023).

Just under one-fifth of the evaluations are of single component interventions, such as the study of job fairs in Addis Ababa (Abebe et al.,2019).

Stipends or in-kind support to participants

In none of the interventions studied did participants have to pay a fee to participate in the intervention. However, participants may incur other costs such as transport and foregone income, so the need to compensate for these needs to be considered as part of programme design. Participants may receive support to participate which can include a stipend, reimbursement of transport costs, and meals.

Participants may also expect to receive other benefits, such as a job placement or a business start-up kit. For example, the project *Creating Opportunities For Youth Employment* in South Sudan provided a stipend, breakfast and start-up tool kits (Chiwara, 2012). There may also be female-specific incentives such as safe transport, and provision of a creche.

Duration

The duration of interventions varied greatly, with evaluations reporting that short duration interventions were often criticized as being insufficient. This variation can occur even in a single project. The mid-term

evaluation of *Creating Opportunities for Youth Employment* in South Sudan reported that the Juba County Vocational Training Centre ran nine-month courses in carpentry, construction, auto-mechanics, tailoring, and plumbing (Carravilla, 2011). But the final report mentioned that just two-week trainings in carpentry, masonry, and construction were being provided. This was considered to be substantially less that the 4-6 months which trainees thought were needed. Therefore, the evaluation concluded that the latter course only raised their awareness on opportunities in those sectors, but it was inadequate to impart technical skills (Chiwara, 2012).

Location

The location of the activities in youth employment interventions can affect participation. Training centres supported by a vocational training project in Guinea were situated some way from the major population centres they were intended to serve, which acted as a barrier to participation. The situation was exacerbated by the fact that there were existing workshops offering similar services already in these areas. The issue also affected the craftspeople expected to provide training. The need to meet transport as well as other expenses meant they experienced a substantial drop in income on moving to the centres compared to what they had been earning offering training in their own workshops in town (Diouf et al., 2017: p.22).

Another issue on location is that only around one-third of interventions are in rural areas – and just over 10% support agricultural employment – despite the fact that 60% of population in SSA live in rural areas and are mostly dependent on agriculture.

Implementation

An important design decision is about who implements the project: the international organization itself, as is common in UN projects, national or local government, or non-governmental organizations. Implementation may also be by existing training centres or firms, as is the case when projects support traditional apprenticeships by master craftspeople. A related decision is whether to have a separate project implementation unit or build implementation into existing delivery systems.

One of the advantages of using existing systems is the potential systemic effects on institutional capacities. The implementation of project activities through local organisations, such as career centres, schools, colleges, and NGOs, frequently strengthens their institutional capacity, thereby fostering the sustainability of interventions. This includes training of trainers, leading to more and better qualified staff (e.g. Cook and Younis, 2012).

Exemplifying that, partnerships with private firms, government departments and local organisations for the *Growth, Enterprise, Employment, and Livelihoods Project* in Somalia were reported as supporting the ability of Somali youth to engage in the economy as entrepreneurs, employers, and employees. The project's private sector collaboration facilitated connections between training, internships, and employment opportunities via career counselling and other services for job placement. Partnerships with government departments and other stakeholders were useful in building the capacity of partner organisations to carry out training. The Somalia Agricultural Girls Association was instrumental in enhancing awareness and participation among young women (USAID, 2022: p.36).

Using existing systems is also beneficial for the intervention. For example, the *Joint Programme on Youth Employment* (JPYES) in Somalia was exceptional compared to other programmes in the country at the time as it was run through the government, rather than as a parallel programme. This resulted in government support which was lacking for other donor projects (Shumba et al., 2019).

Findings indicate that the strengthened intersectoral and public-private partnerships through working with government authorities contribute to projects intervention outcomes. Cooperation with authorities at

national and local level regularly contributes to an improved dialogue between line ministries, as well as between public and private actors (Chiwara, 2012; Ogada and Arunga, 2012). The formation of national councils (Ogada and Arunga, 2012) tends to improve policy coordination and promote a more collaborative working culture across the sectors. Further positive effects include strengthened and more efficient monitoring and evaluation (M&E) systems. These partnerships create a conducive environment for implementation of activities and realization of outcomes. For example, in Uganda's *Youth Leadership for Agriculture* (YLA) programme, private sector partners facilitated youth's access to existing markets by building buyer-seller relationships. This was a huge motivator for youth who had previously practised subsistence farming and were interested in growing commercial crops (Ramirez et al., 2020: p.15).

3. Inputs: money and staff

3.1 Introduction

The theory of change for youth employment interventions begins with there being adequate resources and staff, which are provided in a timely manner. This is frequently not the case, with substantial delays adversely affecting project delivery.

3.2 Funding and staffing

Insufficient or unavailable funds can derail implementation. Both governments and development partners often failed to provide the funds in the agreed budget allocations for projects. This failure often results in partial implementation and premature closure of projects. Some projects or project activities remain only on paper as they have never been launched (see Box 3.1).

Key takeaways

Funding shortfalls compared to planned budgets are common. Delays in funds becoming available are also common.

Funding shortfalls and delays cause project delays, and project activities to be curtailed or cancelled.

Project delays, especially at start up, are the norm, not the exception.

Slow and complicated procurement rules and processes from both donors and governments may cause delays. The requirement of donor HQ approval is a frequently mentioned cause of such problems.

Lack of qualified staff, and rapid staff turnover, adversely affect project implementation.

Box 3.1 Examples of curtailed project activities

The *Niger Delta Job Creation and Conflict Prevention Initiative* in Nigeria closed before the end date because the government failed to sustain regular payment of counterpart funds as agreed at project design stage (Ahmed, 2016).

A public works programme in Sierra Leone only provided 75,000 person days of work rather than the planned 440,000 because funds were delayed (Arowolo, 2012, p.7).

A project to support vocational training in Guinea could not rehabilitate a training centre as originally planned as the funds were insufficient. This meant that the rehabilitation of community by youth trained at the centre was also not carried out (Diouf et al., 2017, p.8).

Projects may also suffer from insufficient staffing or staff who are poorly qualified either because of lack of funds or shortage of qualified staff; see Box 3.2.

Box 3.2 Examples of staffing issues in youth employment interventions

Creating Opportunities For Youth Employment in South Sudan project could not recruit suitably trained staff, having to rely on older trainers, many of whom had had little chance to use the skills they were teaching in practice because of a lengthy conflict in the country (Carravilla, 2011, p.83).

The Somalia *Youth Livelihood Program* had to rely on semi-literate instructors. Moreover, the programme faced a high turnover of instructors (Cook and Younis, 2012).

In Nigeria, the staff recruited for a training centre had many skills gaps which needed to be filled (Ahmed, 2016).

Budget constraints in the *Northern Uganda Youth Entrepreneurship Programme* meant an absence of adequate staff to offer business counselling services. This situation was exacerbated by a general lack of well qualified counsellors which meant that existing counsellors expanded their activities to reach more beneficiaries, specifically taking up more group activities. Fewer counsellors and more participants meant they were unable to develop a strong mutual relationship with the youth which is the basis for successful mentoring, thus undermining the impact of the intervention (Montrose, 2016, p.50).

There may also be staffing problems on the donor side, with donors trying to run programmes remotely or relying on one or two staff so operations come to a halt when they are absent. This problem was most common in fragile and conflict-affected settings such as Somalia (Shumba et al., 2019, p.30). Internal agency procedures and low capacity of staff in some areas and lack of motivation had negative implications for programme delivery in Tanzania (Kundi, 2015, p.44).

3.3 Project delays

Lack of funding, staff recruitment difficulties, and poor coordination often results in project delays, which are discussed in many evaluations. These delays can derail project implementation schedules, often leading to missed deadlines and partial implementation of activities as projects need to be completed within a given time.

A common cause of delays is the slow disbursement of funds. The *Empowerment for Women and Youth* (E4WAY) project in Zimbabwe, was launched seven months late mainly due to the slow disbursement of funds caused by the strict and lengthy procurement processes of the ILO (Arif, 2018).

Lengthy or complex procurement processes, or other bureaucratic requirements are often mentioned as a cause of delays. For example, training centres supported by the Benin *Youth Employment Project* could not readily comply with donor documentation requirements causing delays in the procurement and payment processes (Cherukupalli, 2019). The evaluation of a youth training project in Guinea notes that “the management and procurement procedures implemented by UNIDO were overly complicated. Procurement was largely carried out from Vienna with very little responsibility ceded to the field and Conakry offices. This greatly affected the capacity of the project to carry out its activities in a timely manner” (Diouf et al., 2017: p.14).

The need to get approvals from headquarters is a frequently mentioned specific bureaucratic impediment. The evaluation of a UN project in South Sudan notes that for UNESCO "that the funds for the YEP [Youth Employment Project] are kept in the Headquarter in Paris so the country teams have real difficulties in getting funds for carrying out activities on time or aren't getting any funds at all" (Carravilla, 2018: p.27). Substantial delays in procurement and decision-making processes were reported for the E4WAY project in Zimbabwe as a result of ILO Zimbabwe being required to consult the regional office (ILO 2022: p.40).

4. Eligibility, targeting and recruitment

4.1 Introduction

Interventions need participants. The identification (targeting) of these planned participants, and how they are recruited are important parts of the intervention design. Unfortunately, these topics are neglected in most evaluations. Eligibility will usually be stated, but targeting and recruitment mechanisms and performance are rarely discussed.

Randomized controlled trials (RCTs) generally do slightly better in this respect as clear eligibility criteria and a description of recruitment and assignment are important parts of an RCT design. For example, the randomized evaluation of job fairs in Addis Ababa states the eligibility criteria as young people who: "(i) are aged between 18 and 29 (inclusive); (ii) have completed high school; (iii) are available to start working in the next three months; and (iv) are not currently working in a permanent job or enrolled in full time education" (Abebe et al., 2019: p.6).

Key takeaways

The eligible population for youth employment interventions is of course young people, though the specific age range varies between projects and countries.

There are commonly additional eligibility criteria such as education, employment status, sex, nationality, disability and ex-combatants. The education criterion is often for young people with a high level of education, that is high school or university graduates.

For interventions intended for disadvantaged youth, targeting is most commonly a combination of geographic targeting with community nomination or self-targeting.

Where all young people are eligible, but there is an intention to reach the disadvantaged, it is usually the better off who participate. Even more deliberate attempts to reach disadvantaged youth are often unsuccessful. There is mixed success in targeting female participants.

Recruitment can use existing agencies and channels, or conduct direct recruitment just for the intervention. Researcher-led interventions often use the latter, adopting approaches which are unlikely to be scalable.

Issues of eligibility, targeting and recruitment are often not described, and even less commonly evaluated, in the included studies.

Youth employment interventions are, by their very nature, not open to all people. They are intended for young people, with the definition of a young age varying by country and by intervention. The eligible population may be further restricted in various ways, such as by sex, geography, education or wellbeing.

This report assesses three aspects of targeting:

- Who the target group are (eligibility),
- How they are targeted (targeting mechanism), and
- Targeting performance.

Eligibility and target group are related but not necessarily the same. All young people may be eligible for an intervention but there is a target that, say, 50% of participants are female. For example, the USAID-supported *Building the Potential of Youth Project* in Ethiopia was intended for "unemployed or underemployed rural youth in the 15–29 age group and focusing on the most vulnerable sections of the society, particularly women, and those transitioning out of pastoralism" (Chawla, 2018 p.2). The term "focusing on" is imprecise, but most likely means that these groups should be disproportionately represented amongst the participants, rather than participants coming solely from these groups.

The targeting mechanism and recruitment are also closely related but are not the same. The targeting mechanism is how the target group is identified, whereas recruitment is the process by which they are enrolled into the intervention including any activities undertaken to encourage their participation. The targeting mechanism and recruitment are only the same thing in the case of self-targeting.

This chapter presents evidence from the included studies on these three issues: eligibility, targeting and recruitment.

4.2 Eligibility

Young people are the main eligible population for youth employment interventions. The definition of 'young people' varies between intervention, as it does between countries. For example, the job fair intervention in Addis Ababa was intended for youth aged 18-29 (Abebe et al., 2019), a business training and grant programme in Uganda was for those aged 14-30 (Blattman et al., 2014), and a credit counselling intervention also in Uganda was for young business owners aged 18-35 (Ssekandi and Benjamin, 2015).

The eligible age is not always given in evaluations. For example, the evaluations of *Huguka Dukore Akazi Kanoze* in Rwanda (Dexis Consulting Group, 2019),[6] and the *Youth Employment and Empowerment Programme* (YEEP) in Sierra Leone do not report the eligible age range, though in the latter case it is noted that the official definition of young people in Sierra Leone is 15-35 (Adablah and Bockarie, 2018). In at least one case the intervention itself did not define the age range for 'youth', which impeded the identification of participants. The mid-term review of the *Ghana Employment and Social Protection Programme* reported that "the age bracket for youth has to be set to allow meaningful planning and follow-up" (van t'Rood et al., 2020: p.53).

If there is a lack of alignment between project and national definitions of youth this may cause problems. The financial inclusion activities in UNCDF's *Youth Start* programme, which operated in eight countries in SSA, was intended to target the younger age range of 12 to 24, whereas most national definitions start and end later, typically 15 to 35. However, the lack of alignment with national definitions of youth and apparently weak explanation to local partners of the focus meant that the younger target group was often not reached (Pizzo et al., 2015: p.241).

Other eligibility criteria may relate to:

- *Education*: This criterion may be either 'not currently in' or 'not in education', or it may refer to the education level achieved. For example, the job fairs in Addis Ababa were open to young people not currently in education who had completed high school (Abebe et al., 2019). The *Women's Income Generating Support* (WINGS) project in Uganda was intended for literate participants (Blattman et al, 2014: p.7). Several projects are intended for university students or graduates. For example, the EU funded RESET II programme in Ethiopia stated that "the youth targeted by the job creation activities are educated (university or high school level)" (Altai Consulting, 2018: p.12). The *Stepping Up Skills Project* in Guinea was for unemployed graduates (World Bank, 2023). The YEEP in Sierra Leone included a component – the *Graduate Internship Programme* – intended for university graduates (Adablah and Bockarie, 2018). As noted earlier, close to 90% of school leavers fail to acquire functional literacy. So interventions to support business activities are often targeted at the less than 10% completing university, or at least at high school graduates.

[6] However, the evaluation reports age-disaggregated numbers for participation over the range 15-30.

- *Employment status*: Eligible youth may be required not to be currently working. Since in SSA youth are likely to be engaged in some sort of economic activity, this may be more narrowly defined such as 'not in wage employment'. The job fair in Addis Ababa was open to youth who were 'not currently working' (Abebe et al., 2019: p.6).

- *Sex*: Some interventions are open only or primarily to women, such as the WINGS in Uganda in which the implementing NGO "held community meetings to describe the program and asked the community to nominate 20 of the most marginalized people in the village, asking that roughly three-quarters be women aged 14 to 30" (Blattman et al, 2014: p.9). It is also mentioned that the programme was intended for literate participants (ibid: p.7).

- *Nationality*: Youth benefitting from the wage subsidy under South African's *Employment Tax Incentive* have to have a valid South African ID.

- *Other special characteristics* such as young people with disabilities, ex-combatants or in humanitarian settings. An agricultural training programme in Liberia was intended for ex-combatants and youth at risk of getting involved in conflict (Blattman and Annan, 2011). South Africa's *Expanded Public Works Programme* (EPWP), in which 80% of beneficiaries had to be young people, included people with disabilities amongst its target groups (Motala and Ngandu, 2019). On the other hand, the intervention of *Action on Armed Violence* in Liberia to promote engagement in agriculture deliberately screened out youth with disabilities even though they had expressed an interest in the programme (Blattman and Annan, 2016).

4.3 Targeting

Eligibility concerns who can take part. Targeting concerns how they are identified and reached. Specifically, there are three aspects to targeting: who the target groups are, how they are identified (the targeting mechanism), and targeting performance.

There may be special target groups – e.g. women – within the eligible population, so eligible population and target population are not necessarily the same thing. Aside from youth, common target groups are youth from disadvantaged backgrounds (low income or little education), educated youth (secondary school or university graduates), young women, youth in marginal communities e.g. pastoralists, youth in rural areas, ex-combatants, and youth with disabilities.

Targeting mechanisms

Targeting mechanisms can be classified as:[7]

- *Means testing* whereby eligibility is determined on the basis of income. This approach is used in developed countries but is very rare in developing countries where much income comes from the informal sector and where there is no universal tax or social security system holding income data. The SSA youth employment evaluations have no cases of means testing.

- *Indicator targeting*, which can take one of three forms:

[7] The categorization is from White (2017) based on Devereux (2017).

(i) Categorical targeting which targets based on observed characteristics. This approach is inherent in youth employment programmes since they target a specific age group. Other categories commonly used are: (a) sex, with target percentages for the share of young women; (b) education level achieved as many interventions target secondary or tertiary education graduates; and (c) employment status, as interventions often require participants to not be in wage employment. Some interventions are targeted at business owners.

(ii) Proxy means test which takes other indicators, such as housing quality or asset ownership, as a proxy for income poverty. This approach was not identified as being used in any included studies.

(iii) Geographical targeting, usually to poorer areas. This approach is common as many of the included interventions are not national in scope.

- *Nomination targeting* may be:

  (i) Self-targeting which is used in any programme practicing passive recruitment, i.e. the intervention is advertised and eligible applicants enrol. Such self-targeting is usually biased against the most disadvantaged who are less well informed, and less likely to have the skills and confidence to apply. The exception is when the programme design is such so as the self-targeting is oriented toward the less well off, as in public works programmes which pay a low wage.

  (ii) Community targeting in which 'the community' (usually community leaders) are asked to nominate eligible youth, which may then be screened by the project for eligibility; e.g. in the WINGS programme in Uganda (see above and Table 4.1).

Examples of these different targeting mechanisms are given in Table 4.1.

Table 4.1 Examples of targeting mechanisms

Targeting mechanism	Example
Indicator targeting	
Geographical targeting	RESET II implemented in 'resilience clusters' which are adjacent groups of *woredas* in Ethiopia (Altai Consulting, 2018).
Proxy means test	Not used in any of the included studies.
Categorical targeting	Subsidized internships for university students in Rwanda (World Bank, 2012)
Nomination targeting	
Self-targeting	Interested participants invited to an introductory meeting for a vocational training subsidy in Kenya (Hicks et al., 2013).
Community-based	Community meetings identified eligible potential participants for WINGS, Uganda (Blattman et al., 2014).

Some issues which may arise with targeting approaches are:

- Indicator targeting requires verification of eligibility status. This is not discussed in any of the evaluations. For countries lacking compulsory ID cards such verification will be a challenge.[8]

- The targeting mechanism may be part of the project design, such as in WINGS when the implementing NGO requests community members to nominate participants, or an adaptation made by the community itself, such as district adaptation to the *Expanded Public Works Programme* in South Africa where in some districts community leaders selected people for the programme, in other cases there was a lottery of those names identified by the community leaders and in other cases they were voted on (Motala and Ngandu, 2019: pp.191-2).

- A project supported by an international agency may adopt a definition which is inconsistent with the national definition which can cause problems, as in the case of UNCDF's *Youth Start* programme described above.

- There might be conflicting eligibility criteria. For instance, the evaluation of the RESEST II project stated that the project "mostly targets the most vulnerable community members" but working against this are three considerations: (i) participating households must be able and willing to pay back a loan; (ii) bulls were given to richer farmers as they had access to the necessary forage; and (iii) job creation activities for youth were restricted to high school leavers and university graduates (Altai Consulting, 2018: p.12).

[8] Fewer than half of births are registered in SSA, with the lowest being just 3% of births registered in Ethiopia, so the majority of people do not have birth certificates (Aboagye et al., 2023).

- A multicomponent project may have different targeting criteria for different outcomes. For example, *Building the Potential of Youth (BPY)* in Ethiopia was intended for unemployed youth in general but the Work Ready Now (WRN) Plus component was targeted towards participants with low levels of literacy (Statman and Abera, 2020: p.2).

Targeting performance

Targeting performance can be formally measured as Type I and Type II errors. Type I errors are the percentage of the target group who do not receive the intervention, which is a function of both targeting accuracy and the scale of the programme. Type II errors are the share of the treatment group who do not meet the eligibility criteria. Calculation of the errors refers to the intended target group for the intervention, which may not necessarily be the most needy. For example, a subsidized internship scheme in Rwanda was so labelled by the World Bank as 'regressive' despite being successfully targeted since it was intended for university graduates (World Bank, 2012: p.40).

None of the evaluations report figures for targeting errors. But some do give indications that such errors do occur:

- For the USAID-supported project *Building the Potential of Youth Activity* in Ethiopia, it was reported that "whereas the intent was to serve the most in-need beneficiaries, multiple data sources point to selection of a disproportionate share of well-educated youth (such as for hard-skills training)" (Statman et al., 2020, p.vii).

- In youth unions created in South Sudan for the project *Creating Opportunities For Youth Employment* it was observed that members "are mostly elite urban youth" (Chiwara, 2012, p.33).

In some cases, however, there was more success in reaching the intended target group. A review of ten projects supported by the Swiss Agency for Development and Cooperation (SDC) noted that, although the target population was reached in the majority of cases, "in view of SDC's current strongly poverty-oriented VSD [vocational skills development] strategy, the fact that some projects fail to reach the poor and females (despite this being their prime intention) is particularly worrisome" (SDC, 2011, p.7).

Some studies reported more positive findings, but again in general terms rather than an exact presentation of targeting errors. For example, "in general this targeting was effective, as clients were younger, less educated, poorer, and had lower agricultural production than non-clients" (Blattman et al., 2019: p.9).

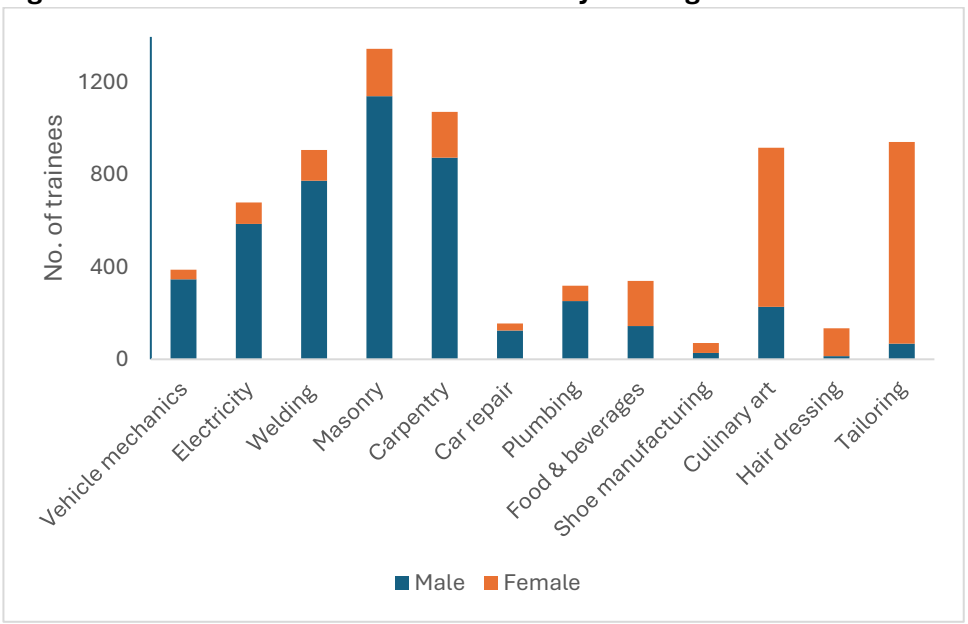
The most commonly reported targeting outcome is the percentage of women participants. Targeting of women was sometimes successful, but often it was not. Simply stating targets alone is not sufficient. Supporting gender-oriented interventions are needed to overcome practical and social barriers faced by young women.

As an example of success, in the *Youth Employment and Empowerment Programme* (YEEP) in Sierra Leone where over two thirds of the beneficiaries of business skills training and related activities were female (119 out of 174), and 80% of the 45 winners of a grant from the Business Plan Competition were female (Adablah and Bockarie, 2018: p.17). In contrast, in South Sudan it was reported that at the only vocational centre in Northern Bahr-el-Ghazal State, only 10% of the students were female and half of them dropped out prior to completion of the nine-month course (Carravilla, 2011).

A common factor mitigating against female participation was that the "occupational profiles were male-oriented" (Garnier-Raymond, 2022: p.13). An example is given by vocational training in Rwanda (Figure 4.1).

Two-thirds of the training places were in male-dominated professions such as masonry and car repairs. The majority of women were in training for two professions: culinary art and tailoring.

Figure 4.1 Distribution of men and women by training course in Rwanda



Source: Derived from Table 1, Grey at al., 2017: 24

Similarly, in Zimbabwe the nature of the training on offer was cited as the plausible reason for low rates of participation by women. It is not just that these are male dominated professions. The majority of the participants are men so in a "dominantly a male environment […] Men could make crude and sexist jokes, which made the young women feel uncomfortable" (Zulu, 2015: 27). This quote is one of the few mentions of sexual harassment. Evaluations generally ignore issues such as women being forced to exchange sexual favours for work,[9] though it is possibly hinted at in one evaluation of a programme in the Democratic Republic of Congo (DRC) where decentralizing approval of business plan approval to mentors "contributed to potentially negative power dynamics between the youth and the mentor" (USAID, 2022: p.14).

Other examples of less successful targeting of women come from two public works programmes, due to an inadequate gender-orientation in programme activities. In the *Labour-based Public Works* programme in Sierra Leone it was reported that despite awareness campaigns at local level, it was still difficult to attract female workers to rural feeder road renovation and construction works. The training of contractors and unskilled workers in contract management also had only eight female participants out of a total of 172, and only 12% of women in the public works were female. The evaluation states this was partly due to the persistence of traditional gender beliefs and practices, which apparently the awareness raising alone was insufficient to overcome (Arowolo, 2012). The evaluation of South Africa's *Expanded Public Works Programme* (EPWP) also notes the difficulty in recruiting women to physically demanding activities (Motala and Ngandu, 2019: p.163). Other factors associated with improving women's participation are discussed in the next chapter under barriers and facilitators to participation.

[9] The lifetime prevalence of transactional sex in SSA is estimated at 60%, reaching 85% in Uganda (Krisch et al., 2019).

4.4 Outreach and recruitment

Once eligibility criteria and the means of identifying eligible potential participants (targeting) have been identified, intended participants need to be informed about the intervention and persuaded to take part. In the evaluations, this process of outreach and recruitment is the least well described part of 'eligibility, targeting and recruitment'.

However, some general conclusions can be drawn. Recruitment methods differ between projects supported by development agencies, which are often large scale, and the usually smaller randomized controlled trials which are commonly implemented by the research team themselves.

Large projects often work with existing groups:

- The *Empowerment for Women and Youth Project* (E4WAY) in Zimbabwe worked with existing value chain cooperatives, which favoured adult women rather than youth, as the products were of less interest to youth who were also not keen on joining cooperatives (Marimo and Goteka, 2022).
- *Youth Employment Support - Jobs for the Unemployed and Marginalised Young People* (YES-JUMP) in Kenya and Zimbabwe also used existing cooperatives as the main channel to reach youth (Karuga, 2012: p.21).
- Somewhat similarly, the USAID-supported *Youth Leadership in Agriculture* in Uganda relied on private sector partners to identify youth which they usually did either by working with youth groups or working with youth already in their network (Ramirez et al., 2020: p.4).

Recruitment to the *Expanded Public Works Programme* in South Africa is decentralized to the local level, with differing recruitment mechanisms being used. The evaluation states that four main recruitment methods were mentioned during interviews:

(i) a lottery of those identified as deserving persons who were identified by community leaders;
(ii) voting for deserving individuals at a community meeting;
(iii) local councillors or traditional leaders (*indunas*) personally nominating participants; and
(iv) vacancy advertisements posted at local municipalities and shopping centres (Motala and Ngandu, 2019: pp.191-2).

Trials conducted by researchers of interventions they have devised themselves are often different, using survey-based approaches which would likely be too costly for a project operating on a large scale. The study of job fairs in Addis Ababa made door-to-door visits to all households in clusters which had been randomly selected for the project. They included in the study all eligible youth who were willing to take part, of which about one-quarter were invited to the job fair by random assignment (Abebe et al, 2019: 6).

Similarly, Hicks et al. (2013) invited all 10,758 youth from Busia District in Kenya who had taken part in the Kenyan Life Panel Survey to introductory meetings about the project. Of those invited, 2,705 attended one of the meetings at which they were told that, if interested, they should come to a second meeting with a letter of support from a local authority or training centre. The 2,163 fulfilling this requirement were recruited to the study, receiving different vouchers for training courses. The weak external validity of RCTs is in part due to the using recruitment approaches that cannot be taken to scale.

However, some researcher-initiated trials do work with existing service providers or through community channels; examples are given in Box 4.1.

Box 4.1 Examples of trials with existing service providers

Abel et al. (2019) recruited participants from young people registered with the Department of Labour in South Africa as looking for work and invited to a career counselling workshop offered by the Department, randomly assigning participants to the workshop alone or *Workshop Plus* which included an additional module on job search strategies.

Godlonton (2016) worked with an agency in Malawi which was recruiting individuals for short-term interviewer positions. Those applicants who met the eligibility criteria of being male, aged 18 and older, completed secondary schooling, and arrived punctually – were asked to take a screening test and submit a CV. The best performing 278 individuals were offered the chance to take place in a trial of short-term work experience.

An intervention for ex-combatants in Liberia recruited participants through community meetings: "From May to October 2009 AoAV [Action on Armed Violence] advertised the program in community meetings, and screened and registered interested and eligible people" (Blattman and Annan, 2016: p.8)

Issues in recruitment

An exception to the general neglect of recruitment in the evaluations is the study of the EPWP in South Africa, which notes the following issues: (i) difficulties in locating people whose names were submitted by local municipalities; (ii) people being recruited from other areas and not from the local communities in which projects were being implemented; (iii) nepotism, corruption (demanding bribes for placements in EPWP), and recruitment of participants along political party lines; and (iv) recruitment of unskilled persons for technical jobs (Motala and Ngandu, 2019: pp.193-4).

5. Participation and retention

5.1 The funnel of attrition

Participation matters. An intervention cannot have an impact if youth do not participate. Hence understanding participation is an important, though often neglected, evaluation question.

A useful way of thinking about participation – and why effect sizes are less than expected in general - is the funnel of attrition (White, 2014). The funnel shows how effects diminish from one stage of the causal chain to the next. The funnel is also usefully applied to examining why fewer people participate in interventions than the project designers expect. For a young person to take part in an intervention, they have to be aware of it, and have to have sufficient knowledge to know if they are eligible and how to apply, they have to perceive participation as worthwhile, and the time and location of the activity have to be suitable. They then have to complete the activity, have the required change in attitude, skills or behaviour and be able to benefit from that. As an example of the middle part of this chain Bandiera at al. (2012 and 2015) report the results for an intervention in Uganda which combined vocational skills training with clubs for girls which discussed sexual and reproductive health and rights. They find that 59% of girls in the treatment communities had heard of the clubs, 21% had attended at least one club meeting, and just 13% of girls continued to attend club meetings (Bandiera at al., 2012: Table 2).

Key takeaways

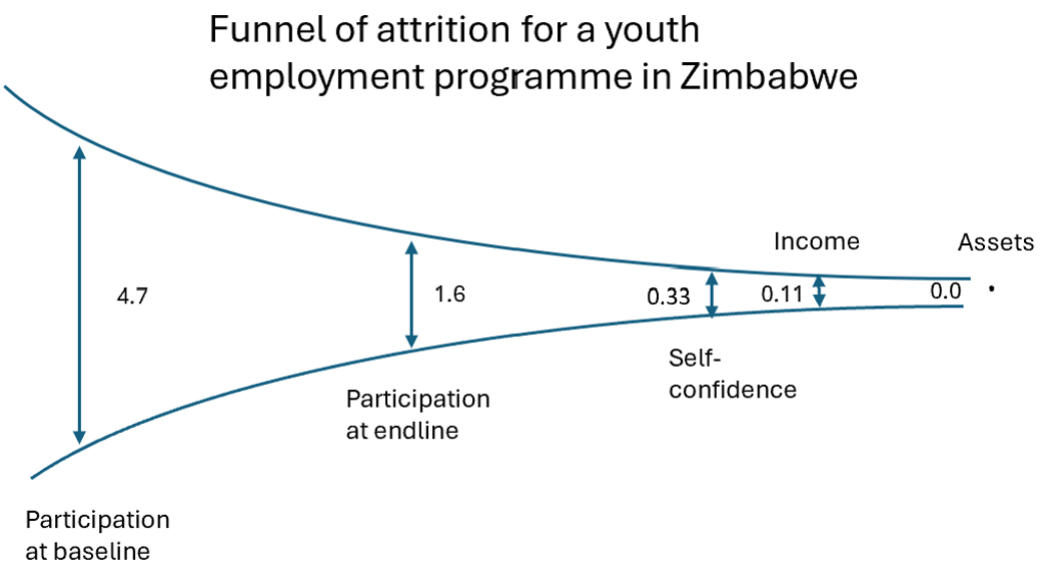
Participation rates are often less than planned for. And dropout is common. But this is not universal, which some interventions exceeding their targets.

The funnel of attrition captures the different stages of participation: awareness, understanding, the participation decision, and completion. In general, there is a drop off at each of these stages.

There is an urban bias, with many interventions in urban centres, especially the capital city, whereas the most disadvantaged youth live in remote areas.

Gender-friendly environments, such as safe transport and creche facilities, can help overcome barriers to female participation. It is difficult – but not impossible - to overcome social norms as to what is acceptable work for women.

Figure 5.1 The funnel of attrition for a youth programme in Zimbabwe



Note: the figures are the effect size (standardised mean difference) for the respective outcomes. Effect sizes are presented in chapter 7.
Source: Authors' own elaboration using data from James et. (2018).

Figure 5.1 shows the funnel of attrition derived from data in the evaluation of *Zimbabwe Works* implemented by the International Youth Foundation (IYF). The programme planned to reach 1,200 youth. This target was nearly reached with 1,183 participants. But by endline there were only 869 youth in the treatment group. In Figure 5.1 these data are converted to a statistic called the standardized mean difference which will be discussed in more detail in Chapter 7. The funnel of attrition means that generally effect sizes will become smaller moving up the causal chain. That effect is clear here with an effect of 0.33 on the intermediate outcome of self-confidence, but only 0.11 on income and no effect on assets.

The general neglect of the issues of awareness, understanding, and motivation for enrolment is a major shortcoming in evaluations in general. In impact evaluations it means that the average treatment effect may be very misleading. On the one hand, it is the correct statistic to report as it is the effect an implementing agency will obtain if implementing the same programme. But the average is misleading as the benefits are very unevenly distributed. Hence it is necessary to explore heterogeneity in order to understand which youth the intervention is best suited for to inform targeting and design in the future.

5.2 Awareness and understanding

As mentioned above, the evaluations in general do not discuss in any detail the recruitment of the intended participants. This is a substantial gap in our knowledge, given the importance of having participants in order to achieve programme impact.

Hence most evaluations have no discussion of how intended participants are made aware of the intervention. An exception is the evaluation of South Africa's EPWP in which participants were asked how they became aware of the programme. Just over one third heard of the programme from friends and family,

and just under a quarter each from councillors and from advertisements and flyers in shops, libraries, and clinics (Motala and Ngandu, 2019: p.191).

In other studies, the most commonly mentioned means of raising awareness is through community meetings, which may also be used to identify participants. This does not necessarily mean that the intended participants are aware as they may not be at these meetings. One reason given for non-participation in EPWP was that the nominee could not be located, a project manager stated "The municipality provided us with names but we could not locate the people, so sometimes we ended up operating with twenty or thirty people short" (Motala and Ngandu, 2019: p.193).

Community meetings are also held where there are gender targets, so community-level gender awareness activities are carried out to encourage young women to attend project activities, such as training, when traditional norms may discourage it, and for women to engage in traditionally male activities. There is no evidence from impact evaluations on how effective these campaigns are. Process evaluations report both success and failure.

Evaluations are also generally silent on whether youth understand the intervention. One exception is the South Africa wage subsidy experiment in which 1,196 youth were assigned a voucher to hand to their employer who could claim cash equivalent to 50% of wage costs. A substantial proportion of recipients did not try to use the voucher at all. This is partly explained by the fact that over one third of the youth (36%) did not understand how the voucher was meant to work (Levinsohn et al., 2014).

But in general, there is little or no evidence on why youth chose to, or not to, take part in interventions. Young people are seen as passive recipients, rather than people with their own agency making choices to optimize their livelihood strategy.

5.3 Participation and retention rates

Participation and retention rates vary greatly. This is shown by the following examples:

- A programme to subsidise vocational training in Kenya invited 10,758 youth to introductory meetings about the project of which 2,705 attended (Hicks et al., 2013).

- A trial in Uganda offered 60 youth groups financial education and 60 groups a group-level savings account. About 50% of group members attended the financial training, and two-thirds of groups took up the savings account option. The financial education consisted of ten weekly sessions, with average attendance just below half of all sessions. Of those attending at least one session, only 13% attended all ten sessions. Of group members in groups which opened a savings account, the account was used by only 14% of group members (Jamison et al., 2014).

- In the trial of an agricultural training intervention in Liberia, 74% of those assigned to the programme attended, meaning that they attended at least one day. And nearly all (94%) of those who attended graduated (Blattman and Annan, 2016).

- South Africa's *Learnership Programme* – which combines classroom learning with on-the-job training – was in principle open to all young people. A study of two years' data (2011-2012) found that only 6% of eligible youth had ever enrolled in the programme and only half of those had completed it (Rankin et al., 2014: p.7).

Participation is also presented as absolute numbers. Programmes with quantitative targets for numbers trained often report reaching or exceeding those targets. For example, *Building the Potential of Youth* in Ethiopia had a target to reach 34,537 female and male unemployed or underemployed but reached a total of 35,984 (Statman et al., 2020: 1). The *Youth Employment Project* in Mozambique supported 20 youth groups as planned in advocating for decent employment (Núnez, 2010). But others fall short. UNIDO's Enhancing *Youth Employability and Entrepreneurship* in Tanzania reached out to 2,000 graduates to recruit them to an internship scheme, of which 409 replied. From these 224 were placed in internships, of which 160 completed their placement (Burke, 2016). A public works programme in Sierra Leone only provided 75,000 person days of work rather than the planned 440,000 because funds were delayed (Arowolo, 2012, p.7).

5.4 Barriers to participation

The **first barrier to participation is youth not being aware of the intervention**, or to understand it sufficiently to make an informed judgement that it is of interest to them.

Once those things are taken care of, young people still may decide that the time and cost of participating is not worth the likely rewards, or that the project is simply not offering something of interest to them. Young people may lack interest in some vocations such as agriculture and training in business skills. For instance, the agribusiness module of the YEEP in Sierra Leone was adversely "affected by youth disinterest in farming" (Adablah and Bockarie, 2018: p.22). Similarly, E4WAY in Zimbabwe encountered low participation of youth as they were not interested in the targeted value chains or in working with cooperatives. The evaluation states that youth preferred horticulture projects because of short crop cycles and possibility of earning quick profits (ILO, 2022: p.15).

A **second barrier is geography**. Many of the most disadvantaged youth live in remote areas. Off road rural communities are at particular disadvantage. Many interventions are offered in towns, or even just the capital city, and so not accessible to the majority of young people. For example, job fairs which take place only in the capital city are not accessible to the vast majority of a country's disadvantaged youth (Abebe et al., 2019, and Duggleby et al., 2015). It is difficult for youth in rural areas to participate, facing irregular and overcrowded public transport, inadequate or no infrastructure such as training facilities, internet and telephone communication connections. Absenteeism and later arrival of students and dropping-out of training were partly attributed to infrequent or unreliable public transport and trainees' lack of personal resources. Some projects address these issues by providing transport and ensuring facilities are sufficiently close to the target group.

The **lack of gender friendly environments at training venues was identified as a bottleneck to participation of young mothers**. For instance, the lack of childcare facilities was noted as a constraint to participation by young mothers for the training provided by the *Huguka Dukore Akazi Kanoze* project in Rwanda (Dexis Consulting Group, 2019: p.30). *Creating Opportunities for Youth Employment in South Sudan* did not conduct planned gender activities, such as a gender sensitive participatory assessment at the design stage which meant the programme lacked the intended gender-inclusive design elements (Carravilla, 2011).

Social norms were also mentioned for poor engagement of young women in youth employment interventions (Carravilla, 2011). Despite awareness campaigns at local level, it was still difficult to attract female workers to rural feeder road renovation and construction works for a public works programme in Sierra Leone. The training of contractors and unskilled workers in contract management also had only eight female participants out of a total of 172, and only 12% of women in the public works were female (Arowolo, 2012). The evaluation states this was partly due to the persistence of traditional gender beliefs and practices

– which apparently the awareness raising alone was insufficient to overcome. However, as these findings are from process evaluations they cannot disentangle the effect of the awareness raising from other factors.

5.5 Facilitators of participation

Some facilitators of participation have been mentioned already: (i) using existing institutions provides access to their networks and their established relationships with young people; (ii) the provision of incentives, such as stipends or transport subsidies; and (iii) support to female participation through creches and safe transport – this is further elaborated below.

However, the motivation for participation is not discussed in the evaluations. And there is a risk of providing too generous incentives. Many donors offer similar programmes in similar locations. So it is perfectly possible that youth attend multiple courses. They are paid a stipend to do so, so attending courses becomes their 'job'. They gain the knowledge and experience to access further courses. The extent of this phenomenon is not explored in evaluations, with baseline data in effectiveness studies not collecting information on courses previously attended.

The *Building the Potential of Youth Project* in Ethiopia which implemented district-level gender awareness campaigns, aimed at mobilizing community-level support in rural and pastoralist communities, before the training course started. The project aimed to recruit equal numbers of females and males, and came close to that with 44% of the participants in hard skills training being female. Nonetheless the evaluation still notes difficulties in women attending training by male trainers or attending evening sessions (Statman et al., 2020: p.24).

The *Benin Youth Employment Project* pushed for mainstreaming gender by targeting 50% female representation and supporting females to enter male-dominated professions such as masonry, electrical work, and tailoring (Cherukupalli, 2019). The target was reached across all training components: for life skills and entrepreneurial training 53% of participants were female; 1,069 master artisans, of which 581 or 54% were female, were trained to have their skills upgraded, and 470 females were trained in trades considered predominantly male dominated. In the latter case 99% of female respondents attended the training, with 96% of female respondents reporting they attended all sessions. The project training had several design features to support women's participation: the timing of the training schedule was compatible with household responsibilities, support was provided for childcare including allowing women to bring a second person to the training to care for their children, transport costs were paid and a mid-day meal provided (Cherukupalli, 2019).

The financial inclusion programme *Youth Start* (YS) implemented in eight Sub-Saharan countries adopted gender-sensitive marketing strategies for the project: "dedicated marketing strategies (including incentive systems rewarding women clients who bring in a certain number of other female clients) and of using specific mobilization channels (e.g. targeting girls-only schools, market places, women associations, etc.) in order to reach out to female youth and meet the YS gender targets" (Pizzo et al., 2015: p.40)

The specific targeting of women in the E4WAY was achieved by making women a larger proportion (60%) of direct beneficiaries. Women benefited from being involved in all stages of the value chain such as from construction of processing plants to operations of the anchor enterprise (AE) as shop floor workers. This shifted the existing gender dynamics by providing women with a platform to learn and practise new knowledge and skills in male dominated fields. The project also addressed the gender imbalances by enabling women's participation as builders in the construction of buildings for AEs which was otherwise a sector dominated by men (ILO, 2022: p.15).

However, one evaluation is critical of the use of quotas: “gender issues in programming tended to be treated as quotas (percentages) to be achieved in terms of women beneficiaries in most projects rather than a more systemic, transformative approach” (ADA Consultants, 2013).

5.6 Strategies for increasing participation

Based on the evidence reported above some strategies for increasing and maintaining participation can be identified. These include:

- **Over-recruit**: not everyone invited will come, so to achieve participation targets invite more than the planned number of participants.
- **Conduct outreach through existing channels**, especially channels which are trusted by the target group. This can include educational institutions, existing youth groups, and local authorities
- **Choose time and place that suit** the intended participants.
- **Pay transport costs or provide transport**: It is common for projects to provide transport costs for young people to attend training, including safe transport for female participants.
- **Provide childcare facilities**: Lack of such facilities is given as a constraint to participation by young mothers. In one case a training scheduled was designed so that women participants split the class into two sections (AM and PM sessions), with each group watching the other’s children (Cherukupalli, 2019).

6. Implementation

6.1 Introduction

The success of interventions in improving youth employment usually depends on implementing the planned activities. This chapter presents evidence from the evaluations of barriers and facilitators to implementation. Barriers are factors impeding successful implementation, and facilitators those which assist it. The same factor can be both a barrier and a facilitator. For example, coordination can be a barrier if absent or weak and a facilitator if well managed.

Evidence of a particular barrier – or facilitator – does not mean that all youth employment interventions exhibit these traits. They have been reported in evaluations included in this review (see Annex 1 for which studies are coded as containing evidence with respect to which themes, and a more complete listing of specific issues as mentioned in the studies) and are so issues that programme designers and managers should be aware of, so as to avoid or safeguard against barriers, and find ones to build in or support facilitators.

6.2 Barriers to implementation of youth employment interventions

Poor coordination and communication

Poor coordination can occur between government agencies, between government agencies and development partners, between development partners, and between both of these and the private sector. Lack of coordination includes duplication and a lack of communication and information sharing. The problem can be exacerbated by having a very large number of organizations involved in a single programme.

Key takeaways

The same factors – such as government commitment – can be either a barrier or a facilitator depending whether they are in place or not.

Common issues hindering implementation were: (i) poorly functioning project implementation units; (ii) weak coordination between government, donor and IPs; and (iii) poor, inadequate or underused infrastructure and equipment.

Factors supporting implementation are: (i) good collaboration and partnerships; (ii) sufficient support for project staff.

For example, while the Chief Technical Adviser for the *Creating Opportunities for Youth Employment Programme* in South Sudan was meant to coordinate among agencies he did not have the necessary authority (Carravilla, 2011). Moreover, this was a complex programme that involved ten international development partners and a wide range of government agencies. This situation is described as follows: "UNIDO is doing a very similar work than ILO; UNAIDS, UNESCO and UNFPA are involved in issues related to HIV and AIDS; UNESCO was responsible for managing the preparation of some business training manuals that required funds from different agencies (this is another activity that didn't go ahead because agencies didn't manage to put funds together) while these manuals had already been developed by some other agency" (Carravilla, 2018, pp.25-26).

In the *YEEP* in Sierra Leone, the lack of a coalition for the youth sector involving the development partners meant there was no mechanism for coordination. The practice of different actors involved in youth employment interventions side stepping coordination meant missing out on possible benefits from synergies (Adablah, 2018).

Coordination issues can be addressed by the government playing a lead role. The Kenyan Government formed sector-based donor coordinating units (DCUs) such as the private sector donor group (PSDG) DCU and micro, small and medium enterprises (MSME) DCU in an attempt to foster coordination resource mobilization for the implementation of projects (Ogada and Arunga, 2012).

Poorly functioning project implementing units

Weak capacity of project implementing units (PIUs) can stem from insufficient staff or skills in project management and coordination, data management, accounting, budgeting and budget management; weak data management systems; lack of regular meetings and high turn-over of project staff and trainers.

For example, the funding for the *Joint Programme on Youth Employment in Somalia (JPYES)* provided insufficient funding for even one full-time staff position in the project coordination unit for a project which funded many separate activities from separate agencies (Shumba, 2019: 30).

In the *YVRDP* project in Sudan funded by UNDP, implementing organizations or community-based organizations (CBOs) had limited capacity in coordination, project management, and database management which, as concluded in the evaluation, undermined monitoring of project activities (Abduljabar, 2015).

Poor or inadequate infrastructure and equipment

Inadequate infrastructure is mainly associated with projects implemented in conflict-affected countries such as Sudan, South Sudan and Somalia. The different types of missing or inadequate infrastructure included training spaces, internet and telephone services, electricity, and sanitation facilities; see examples in Box 6.1. However, technical issues and lack of necessary training to use project-supplied equipment also occur elsewhere. Such problems are indicative of poor planning, with programme designers and implementers paying insufficient attention to the context in which the intervention will be implemented.

Box 6.1 Inadequate or inappropriate equipment and supplies

Youth volunteers and trainers in *YVRDP*, Sudan, were given laptops and internet devices to aid their communication with NGOs and other implementing partners, but such equipment was not used due to lack of electricity for charging computers and lack of internet access in the war-ravaged Darfur region Sudan (Abduljabar, 2015).

Much of the equipment supplied by a youth training project in Guinea was not functional or was not properly installed. Two photovoltaic power plants stopped working soon after installation, dryers could not be used as they were improperly installed, and a workshop installed by the project for the manufacture of Shea butter was not used as it was too far from the water source. And peelers and mills for the processing of fresh cassava were not operational as beneficiaries had not received appropriate training (Diuof at el., 2017: pp.15, 25).

In an agricultural intervention for ex-combatants in Liberia many participants did not receive the full package as animals being imported died in the repeated attempts to transport them. As a result, some participants "received materials to build a pig sty or chicken coop but not the animals" (Blattman and Annan, 2016: p.18).

Lack of government commitment

The lack of government commitment to projects can occur for a number of reasons and manifest itself in various ways. Common problems include: (i) pledged government financial and technical counterpart support not being provided; (ii) failure to gazette youth training centres established by non-government agencies; (iii) high turnover of political leaders and other decision-making staff; and (iv) non-involvement of government agencies in some projects implemented by development partners.

Causes of lack of government commitment may be: (i) poor alignment of the project with government priorities; (ii) disinterest by government officials to participate in new projects that are not their main task without incentives being provided; (iii) projects bypassing government channels; and (iv) there being other existing initiatives carrying out similar activities.

An example of a lack of commitment brought about by a change in government priorities come from Tanzania where there was more focus on implementing new initiatives, notably the delivery programme *Big Results Now* (BRN), which meant that planned activities under the ILO-UNDAP programme were thus no longer a priority for government institutions, so they did not implement agreed programme activities (Kundi 2015: p.68). In Nigeria, the Delta state government launched a separate scheme rather than support in scaling up the UNDP-funded project aimed at engaging disillusioned and ex-militant youths (Ahmed, 2016). As a result, the newly established multipurpose youth training centre had not gazetted in the ten years from inception of the project in 2006 to 2016 when the evaluation was conducted. Therefore, the training centre lacked the mandate to operate as government accredited centre (Ahmed, 2016).

6.3 Facilitators for implementation of interventions

Many facilitators are the converse of the barriers mentioned above:

Government commitment and support

Strong government commitment is seen to be associated with successful implementation. Support is shown by providing agreed personnel and financial support to development projects initiated by international development partners, as well as cooperation with coordination activities.

Cooperation with authorities at national and local leadership contributed to an improved dialogue between line ministries, as well as between public and private actors (Chiwara, 2012; Ogada and Arunga, 2012). For example, the Zimbabwe's *Empowerment for Women and Youth (E4WAY)* project funded by African Development Bank (AfDB) was reported to have received strong government leadership, ownership, and financial support (Arif, 2018). The *JPYES* in Somalia was exceptional compared to other programmes in the country at the time as it was run through the government, rather than as a parallel programme. This resulted in broad government support (Shumba et al., 2019). The government actively supported the ILO *Skills for Youth Employment and Rural Development Programme*, along with employers, and labour in Zimbabwe through the tripartite programme structures at both national and district level. The national steering committee (NSC), the technical working group (TWG), provincial implementation committees and district implementation committees (DIC) were government-driven and got support from various ministries (Zulu 2015: p.27).

Different levels of ownership and involvement of local governments were observed in the productive and decent work for youth programme in the Mano River Union countries. For example, the local governments were closely involved in Côte d'Ivoire. The support from the government included providing women's groups with a site, offering political support to the programme, nominating two focal points. The district councils housed all the platform services and paid the staff (Lyby and Sy, 2010: p.35).

The ILO project *Youth Entrepreneurship Facility (YEF)* aimed to introduce entrepreneurial education into schools and colleges in Kenya, Tanzania, and Uganda. This went well in Uganda where there was buy-in and a close working relationship with the relevant authorities. It was delayed in Kenya where there was resistance to the idea (Arowolo et al., 2015).

Collaborations and partnerships

Projects can benefit from collaborations and partnerships through strengthening of their institutional capacities, information sharing and ownership. Implementation of project activities through local organisations, such as local constructors, career centres, colleges, and NGOs, frequently strengthened institutional capacity, thereby fostering the sustainability of interventions.

In Liberia's *National Youth Volunteer Scheme* (NYVS), volunteers worked with existing institutions and structures to make progress regarding topics considered sensitive, such as gender violence and inequality. For instance, in Lofa county's Foya district, volunteers collaborated with the *Men And Women As Partners To End Violence Against Women* (MAWPEVAW) programme (Matos et al., 2008).

The continuation and success of *Growth, Enterprise, Employment and Livelihoods* (GEEL) activities in Somalia when shocks occurred was a result of relationships built during the duration of the programme with private sector partners, government officials at all levels, financial institutions, and other stakeholders. Through these relationships and partnerships, GEEL was able to devise response strategies quickly and efficiently to unforeseen circumstances during the drought and the COVID-19 pandemic. For example, GEEL worked with

partners and could promptly reprogram activities in the livestock and dairy sectors to tackle the challenges posed by drought in these sectors (USAID, 2022: p.23).

Adequate and additional support

In the NYVS programme in Liberia, participating volunteers benefitted from the support of their project officers (POs). The POs guided the volunteers, helped with the particulars of project implementation, intervened during sensitive situations and addressed the difficulties participants faced while seeking accommodation and other important needs. NYVS volunteers also benefited from the support provided by their host institutions such as the hospitals and schools in which they were deployed. These institutions ensured a supportive environment for the volunteers, understanding that this would improve the services of the institution (Matos et al., 2008: p.10).

7. Impact

7.1 Impact on employment

The effects of youth employment interventions on youth employment are mostly modest. This finding is in contrast with the findings of studies which report 'results' based on a factual analysis of what happens to intervention participants. For example, the review of youth employment programmes in the Horn of Africa reports that: "Engagement in TVET and various forms of employment-related trainings has shown a positive impact on the prospects of finding employment […] This can be seen in the context of the Support to Skilling Uganda Strategy (SSU) […] The results of a survey of 1,200 trainees and 58 employers indicated that, of those who undertook regular trainings (between six- and nine-month periods), 65 per cent found employment, with 16 per cent in wage employment and 49 per cent self-employed. Likewise, GIZ's skills development programme under the Kenya Consortium showed a job placement rate of 87 per cent in formal and self-employment in the seven counties of implementation" (Minaye and Iyer, 2022: p.18).

Key takeaways

- The impact of youth employment interventions is generally low, increasing employment by at most a few percentage points.
- Impact is higher when interventions are bundled in multicomponent interventions.
- Many more young people in SSA follow apprenticeships than vocational training. But external support is much more focused on the latter**.**
- Apprenticeships appear to be the most effective intervention.
- Public works are worth a closer look.
- Wage subsidies have low impact, and do not seem suitable in a SSA setting
- Youth employment interventions do not reduce migration
- Duration matters: longer interventions have more impact.

But such analysis ignores the counterfactual of what would have happened had the young people not been involved in youth employment interventions. It is not uncommon for employment to increase also in the comparison group.

For example, in a study of skills training programme in Ghana employment in the last year amongst the treatment and control group at baseline was 45% and 40% respectively. At endline it had risen to 61% amongst youth taking part in the project, but it has also risen to 54% amongst those not taking part in the programme (Unnikrishnan and Pinet, 2022). A 'results' approach would simply say that 61% of youth taking part in the programme had been employed in the last 12 months. A before versus after approach would state that employment rose by 16 percentage points amongst the youth in the programme. But an impact evaluation design applies a double difference approach in which the increase in the comparison group (14%) is deducted from the increase in the project group. So, the absolute difference is a 2% impact on the probability of employment, or a 5% relative increase (2/40 x 100 = 5%). Some examples of impact estimates are given in Box 7.1.

Box 7.1 Examples of impact estimates

- A wage subsidy scheme in South Africa found that youth receiving the voucher for a six-month subsidy were 7% more likely to be in wage employment after one year than those who did not receive the subsidy, with this effect persisting also after two years (Levinsohn et al., 2014).
- The *Employment Tax Incentive* (ETI) in South Africa allowed firms to claim an incentive when they hire a worker aged between 18 and 29 years: employment in this target group increased by 2% (Moeletsi, 2017).
- Following a programme which provided residential agricultural training to former and potential combatants in Liberia an additional 16% of them returned to farming compared to the control group (Blattman and Annan, 2016).
- A group receiving transport subsidies to support their job search were 7% more likely to be permanently employed after four months than those not receiving the subsidy (Franklin, 2016).

Systematic reviews present statistical analysis of effect sizes, that is the measure of impact. Meta-analysis averages the effect across all studies included in the review. The average effect from meta-analysis is commonly reported as a standardized mean difference (d), which is the difference in the mean in outcomes between treatment and control, divided by the standard deviation of the outcome. In our own analysis, rather than d we report Hedge's, which includes a small adjustment to d to account for bias in small samples. A d or g of less than 0.1 is considered a small effect, 0,1-0.2 is moderate and above 0.2 a large effect.

The first systematic review of youth employment interventions was Kluve et al. (2017). This review was updated as ILO (2022). This project has carried out a new quantitative review of SSA studies (to be published as Eyal et al., forthcoming. All three reviews report a headline statistic of the effect of all interventions on employment outcomes. There is a striking uniformity in estimates of this statistic in systematic reviews of youth employment (Table 7.1). In our own analysis, the average effect on employment outcomes based of 1,874 effect sizes from 67 studies is 0.07 (see also Annex 2).

Table 7.1 The average effect of youth employment interventions on employment: standardized mean difference (SMD) from different systematic reviews

	All outcomes		Employment	
	All countries	SSA	All countries	SSA
ILO (2022)	0.08	0.10	0.07	..
Kluve (2017)	..	..	0.04	..
Our estimate	..	0.07	..	0.07

This employment variable in our analysis combines four measure of employment: (i) employment status (employed or not); (ii) labour supply (e.g. hours worked); (iii) migration; and (iv) nature of employment (mainly wage employment versus other). The average effect on the first and last of these from our included studies is 0.08. There is a slightly smaller effect on labour supply (0.06), and no effect on migration.

The figures of 0.08 effect on employment equates to an impact of a 3.4 percentage point absolute difference in employment rates between those in the programme and not in the programme or a 5.7%

relative increase (see Annex 1).[10] Another way of presenting the results is the 'number needed to treat'. That is, how many youth have to take part to create one job which would not be there in the absence of the programme. The effect size of 0.08 converts to a number needed to treat of 29. That is, for every 29 youth subject to the youth employment programme one will enter employment who would not have done so in the absence of the programme.

The impact varies by the type of intervention. However, it is important to note that: (1) most the estimated effect sizes are based on a small number of studies; and (2) the finding may be more nuanced than can be captured in impact estimate for three reasons: (i) nature of employment – the intervention may switch people into wage employment from informal or unwaged employment, but have little effect on overall employment; (ii) timing – it may take time for earnings benefits to appear, this is especially so of apprenticeships when apprentices pay to be apprenticed in the early years, and there is a lack of long-run studies to capture these benefits; and (3) the results are by single intervention, but are generally more effective when delivered as part of a multicomponent package.

Table 7.2 shows the results of our analysis for the interventions which are included in the accompanying youth employment toolkit. Low (one icon) represents g<0.1, medium 0.1<g<0.2, and large g>0.2. These results are presented numerically in Annex 6. Our analysis shows that wage subsidies, business mentoring an careers advice have the lowest effect on employment. training interventions are the least effective (see Annex 2 for detailed results). Training has a larger effect , notably life skills training followed by business skills training.

The analysis in Figure 7.2 is not reassuring. Most interventions have low impact – though this sometimes improves for when they are delivered jointly as part of a multicomponent interventions. **The most effective intervention appears to be life skills training, though the largest effect on skills comes from apprenticeships**. And indeed **many more young people in SSA follow apprenticeships than vocational training. But external support is much more focused on the latter.** Public works also deliver at least short-run benefits. But outside of South Africa, public works are not used in SSA except in crisis settings. The very limited evidence suggests that they are worth a closer look.

Key to Table 7.2

Table 7.2 shows the impact of ten specific youth employment interventions for three outcomes for employment, skills and earnings. A three-point scale is used for each outcome: Low g< 0.1; Medium 0.1 < g < 0.2; Large > 0.2

A different symbol is used for each outcome

Employment 

Skills 

Earnings 

[10] This calculation assumes that 60% of the control group also enter employment. The absolute increase is 63.4-60=3.4%, and the relative increase is (63.4-60)/60= 5.7%. The basis for this calculation is reported in Annex 1. If we assume instead that only 50% of the comparison group become employed the result converts to a 3.6% absolute impact and 7.2% relative one. The number needed to treat falls from 29 to 28.

Table 7.2 Effect of specific interventions

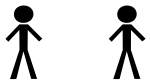
		Low	Medium	High
Apprenticeships and internships				
Apprenticeships and internships are temporary employment contracts during which the young person acquires skills and work experience. Apprenticeships may also include off-the job training	Employment			
	Skills			
	Earnings			
Business mentoring				
Business mentoring programmes pair experienced business professionals (mentors) with less experienced entrepreneurs (mentees) for the purpose of guidance, support, and skills development. Business mentors help mentees build skills by providing advice and feedback on their business practices.	Employment			
	Skills			
	Earnings			
Business skills training				
Training to equip a young person with the skills to start and run a business, such as preparing a business plan, financial management, and marketing strategy.	Employment			
	Skills			
	Earnings			
Careers advice				
Careers advice, which is also called careers counselling or careers guidance, advises young people on job search and possible careers, and may provide connections to employers through job fairs or career days.	Employment			
	Skills			
	Earnings			
Digital interventions				
Digital interventions are programmes that make use of digital technology to enhance employment opportunities for people. This includes: (i) digital skills training; (ii) job search and matching; (iii) digital platforms, and (iv) improving community connectivity (e.g. i-hubs)	Employment			
	Skills			
	Earnings	Insufficient evidence		

Table 7.2 Effect of specific interventions (ctd.)

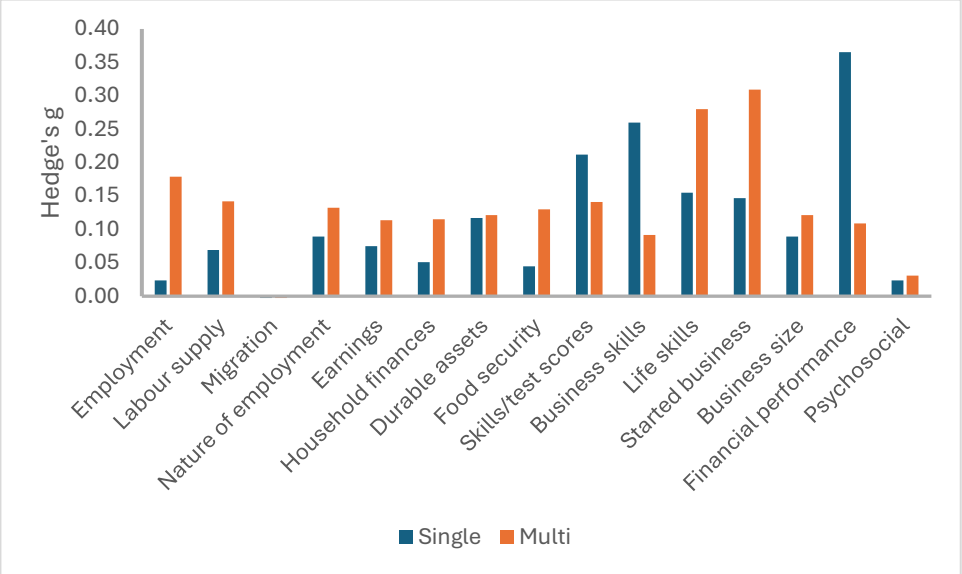
		Low	Medium	High
Life skills training Life skills are as the psychosocial and interpersonal skills that are important for successful employment	Employment			
	Skills			
	Earnings			
Loans and grants Provision of loans or grants to micro and small enterprises run by young people. Grants can be in cash or kind ('start-up kits).	Employment			
	Skills			
	Earnings			
Public works Public works programmes are publicly funded programmes which employ people for a limited duration. Traditionally public works programmes have invested in infrastructure, but may also be used for conservation work or social care. Workers may receive training before engaging in the public works.	Employment			
	Skills			
	Earnings			
Technical and vocational education and training Education, training and skills development providing occupation-specific technical skills and interpersonal skills for the workplace	Employment			
	Skills			
	Earnings			
Wage subsidies A youth wage subsidy is a payment made to, or claimable by, the employer or the young person for the employment of young people.	Employment			
	Skills			
	Earnings			

Our analysis also considers moderators – that is design and contextual factors which may affect impact. This analysis shows that duration matters, with a larger effect from longer interventions. The effect is weaker in larger interventions than smaller ones, reflecting the common finding that interventions generally show larger impact during piloting than when taken to scale.

Multicomponent interventions

As noted in Chapter 2, the vast majority of youth employment interventions are multicomponent. Our analysis shows that **multicomponent interventions have a substantially larger effect than single component**. In the case of employment, the effect size for multicomponent interventions is 0.12, compared to just 0.03 for single component, which corresponds to relative increases in employment of 8.5% and 2.2% respectively. The robustness of this finding was tested using a different analytical approach called network meta-analysis (see Annex 5) which found that the effect of multicomponent interventions is six times that of single component (effect sizes of 0.30 and 0.05 respectively).

Figure 7.2 Analysis of effect sizes for single versus multi-component interventions



Source: Analysis of authors' dataset.

We used various approaches to assess the optimal combination of interventions. Based on the available evidence, **the largest effects on employment are achieved by combining training with finance,** with the largest effect when these two are offered also with support to employment. Training also has a larger effect when combined with labour market information. Any one of these interventions alone will have a smaller effect.

7.2 Impact on earnings

There is a slightly smaller effect on wages and earning than employment (SMD=0.06) which is not statistically significant across all studies. There is considerable variation between studies, with some studies finding quite large effects.

Box 7.2 Examples of impact on earnings

- After completion of the *National Apprenticeship Program* in Ghana, youth had 13% lower earnings than the control group who had not been incentivized to enter the programme (Hardy et al., 2019).
- In an intervention in Kenya which provided digital training, those youth receiving the training saw no improvement in incomes, but youth got both training and a job referral enjoyed a 40% increase in wages (Atkin et al., 2021).
- An example reporting larger effects is the *Empowerment of Adolescent Girls and Young Women* (EPAG) project in Liberia, which resulted in a 60% increase in earnings, mainly because youth not previously engaged in income generating activities became so, but also because earnings from these activities increased (Adoho et al., 2014).

7.3 Impact on other outcomes

The largest effect by outcomes are those on skills and business performance (d=0.14 and d=0.25 respectively). The effects are not greatly different between the different types of skill: technical (d=0.17), business (d=0.13) and life skills (d= 0.14).

There are similar size effects for starting a business and business size (d=0.15 and d=0.13 respectively), with a much larger effect for business performance (d=0.31), though this larger effect is largely because of an influential outlier (Brooks, 2018: d=4.46). The effect size for starting a business suggests an absolute effect of 5% and relative one of 24% (see Annex 1). These results support the general orientation of many interventions to supporting young people in starting a business, though there is a caveat to that finding which is discussed in the next chapter.

This review is the first to separate out psychosocial outcomes such as mental health. The effect on all of these outcomes is small and insignificant. However, there is a larger and significant effect from multicomponent interventions. Very few studies report earnings expectations, so these were not subject to meta-analysis.

There is increased interest amongst international agencies in investing in youth employment to reduce migration to developed countries. **The meta-analysis finds zero effect on any form of migration**. However, this requires further analysis as some interventions are intended to encourage migration. For example, the *Stimulating Household Improvements Resulting in Economic Empowerment* project in Bangladesh young women were provided training in skills for the garment industry to encourage urban migration (Raihan and Shonchoy, 2016). There are also interventions to support international migration, though there are no studies of these interventions in the EGM.

A key distinction needs to be made between internal mobility or regular migration, on the one hand, and irregular migration, on the other. In one study, youth who had participated in TVET were in many cases able to use the skills they had gained to seek employment, and thus arguably had more choice about where they went and could move more safely than those who lacked skills, resources and choice, and who therefore opted for irregular migration (see, for example, Altai Consulting, 2021, study of the Horn of Africa).

In general, we see that **effect sizes are larger for intermediate outcomes (attendance and skills) than for final outcomes (employment and income)**. This is the funnel of attrition referred to in Chapter 2.

7.4 Barriers to attainment of youth employment outcomes

Earlier section of the report identified barriers to participation and barriers to successful implementation. A third barrier are factors which disrupt the causal chain between intermediate and final outcomes. These barriers can be identified from qualitative analysis, thus throwing some light on small effect sizes. The reported barriers to achieving outcomes include: inadequate start-up capital, inadequate funding, inadequate capacity building of beneficiaries, poor labour market conditions, weak management and unfriendly training environment. Most of these barriers support the case for multicomponent interventions. In more detail:

- **Lack of seed start-up capital** in the form of tool kits and grants, undermined transition from training to entrepreneurship. Even for TVET projects that had components of grants and loans, the amounts received by recipients were small and not available to everybody. "Following graduation, there is no easy way of acquiring the needed capital to start or expand beneficiaries' businesses" (Adablah, 2018: p.27).

- **Inadequate funding of projects** led to partial or incomplete implementation of activities which in turn affected expected outcomes. For instance, in a project in Darfur, Sudan, the government's budget contribution of 40% was never provided and therefore activities were only partially implemented (Abduljabar, 2015).

- **Low employability of TVET graduates** featured as key finding as their training does not always match employers' requirements. Employability is a key causal process in skills training interventions. Through skills training young people acquire technical, business, and soft skills which make them employable. However, the following issues were identified in evaluations of training intervention: lack of a standardized system for vocational training, weak training curricula, shortage of training facilities, incompetent trainers, inadequate number of training staff, student absenteeism, and too short training schedules (Cook and Younis, 2012; Carravilla, 2011; Chiwara, 2012).

- **Poor labour market conditions** resulting from the limited growth of the private sector impeded an increase in jobs and a favourable environment for establishment of enterprises. The effect of poor labour market conditions is most evident at a time of crisis. Following a vocational training intervention in Sierra Leone only 15% of the treatment group were employed. But that was 3% more than in the control group, as employment had collapsed on account of an Ebola outbreak (Rosas et al., 2017).

8. Sustainability

8.1 Assessing sustainability

Sustainability is the continuation of intervention benefits beyond the life of the intervention. This is best measured by long-run studies. However, there are few such studies in general, and none included in this review. The exceptions are studies which show the impact of labour market outcomes of early child development interventions, which is argued to come from the development of non-cognitive skills (Heckman et al. 2006).

Key takeaways

- There are no studies which directly measure if benefits are sustained in the long-run.
- A note of caution for support to self-employment is warranted as the majority of businesses fail.
- An alternative is to assess if the activities themselves are sustainable. This may be assessed by looking at institutional, technical and financial sustainability.
- The picture with respect to these criteria is at best mixed, with many interventions failing to address institutional and financial sustainability.

In the absence of a direct measure of sustained benefits, there are two approaches to assessing sustainability: (i) the intervention brought about a change which will lead to sustained future benefits, such as helping a young person onto a better career trajectory than they would have achieved in the absence of the intervention; or (ii) that the activities undertaken by the intervention continue beyond the original intervention, e.g. because a life skills curriculum becomes institutionalized in the education curriculum. There are institutional, financial, and technical conditions to be met for the activities to be continued.

8.2 Bring about changes to sustain future benefits

Jobs may be sustained either because the young person gains skills and experience which allow to gain or stay in employment, or the employer values an employee they took on because of an intervention sufficient to keep them in employment beyond the intervention. Finally, jobs will be sustained if the young person starts a business which is successful.

There is little direct evidence with respect to these mechanisms. One exception is the study of the youth wage subsidy in South Africa. Youth receiving the voucher for a six-month subsidy were 7% more likely to be in wage employment than those without the voucher, and this effect remained at the longest follow up of two years (Levinsohn et al., 2014). A second exception is the study of apprenticeships in Côte d'Ivoire which reports that four years after the start of the experiment, youth earnings of youth in the intervention group were higher by 15% (Crépon and Premand, 2019). But even these are not very long-run effects.

Whilst studies did find that businesses were established by some youth as a result of interventions, it is a stylized fact that 50% of new businesses fail within five years. This appears to hold true in SSA. A study of SMEs in South Africa reports that 70% fail in the first 5-7 years (Bushe, 2019), a study of Kenyan firms in the 90s reported that 71% of smaller firms, and 64% of larger ones, failed over the period 1992-1999 (Nkurunziza, 2005), and in Ghana a study of firms from 2003-2013 found that over 50% had closed. And, of course, many more firms were hard hit during the COVID-19 pandemic. Hence, whilst there are no long-run studies of interventions to support young people start-up businesses, it is likely that many of those businesses fail so the benefits are not sustained.

8.3 Putting in place the conditions for sustainability

Sustainability can be supported by putting in place the conditions, or prerequisites, for sustainability to be achieved. There are different sets of conditions for sustainability (Carvalho and White, 2004). These conditions relate to sustainability of the activities so that benefits continue to be realised. The conditions are: (i) technical - the knowledge and skills, as well as necessary equipment, are available to continue the activities; (ii) financial - funding is available to support the delivery of the activities; and (iii) institutional - delivery is within an organization's mandate, and within the organisation there is clear responsibility for delivery which is covered by the job descriptions of those responsible for delivery. The institutional aspect is often important for financial sustainability.

Institutional

Institutional sustainability refers to the institutional support necessary to maintain project activities being in place. Ways in which this can happen are:

- The project supports the creation of a new agency, such as the creation of a Directorate of Vocational Training within the Ministry of Labour and Support at state level in South Sudan (Carravilla, 2011).

- Sustainability is also facilitated by other agencies assuming responsibility for providing services. For example, in Sierra Leone beneficiaries of project business development services can register their businesses with the City Councils and other licensing authorities, as well as the relevant trade organizations. Such registration provides support and conditions for business success and sustainability (Adablah and Bockarie, 2018: p.28)

- Integration of the curriculum supported by the project into the national curriculum: this was done for the *Work Ready Now!* curriculum which became part of the national technical education curriculum in Rwanda (Dexis Consulting Group, 2019: 27). In Uganda, The *Entrepreneurship Education Curriculum* was adopted at A level (Arowolo et al., 2015). South Sudan's YEEP programme standardized the skills training curriculum in at least 12 trades, ensured refresher training for the teachers (specifically for competency-based training modules), and consulted multiple government ministries to bring them all onboard to promote the curriculum (Gomez and Wandaloo, 2022: p.26.

- The project beneficiaries themselves can also support sustainability of project-initiated activities. In Kenya project beneficiaries from green jobs activities under the joint ILO/Government Youth Employment for Sustainable Development (*YESD)* initiative began to influence some of the policies that were in process of development including the *Medium Term Plan II* for the *Vision 2030* (Karuga, 2012b: p.34)

Institutional sustainability is lacking if national institutions do not adopt services or activities supported by the project.

Some studies explicitly reported that the project designs did not provide for exit strategies with respect to financial, technical and institutional forms of sustainability. For example, in the case of the *YEEP* in Sierra Leone the evaluation reported that "there was overdependence on the donor's support with no sign of sustainability plans" (Adablah and Bockarie, 2018, p.19).

The *Youth Start* (YS) programme design failed to consider the number of staff required in the core programme team to function sustainably. Over-reliance on a single programme manager who is involved in all aspects of the programme functioning hampered the perspective on how other similar projects or follow-on activities can be effectively managed. The evaluators pointed out that, "the Program Manager's

commitment, diligence, and expertise have raised the performance bar to unsustainable levels, in respect of the likely and reasonable resources required to run a program like YS" (Pearson et al., 2013: p.34).

Similarly, although the project-supported career service in Sierra Leone was located within universities, they had not been mainstreamed into the universities' curriculum and therefore do not have adequate support of the institutions. Therefore, without the frequent and recurrent support of the donor, the facilities have deteriorated in some of the centres. Furthermore, there is not sufficient capacity to meet the rising interest in the service (Adablah and Bockarie, 2018)

In Uganda, the implementing partner, Media House, did not take ownership of the media activities to promote a culture of entrepreneurship amongst young people under the EU-supported *Youth Entrepreneurship Facility* so these activities were not continued beyond the project (Kintu, 2016: p.29).

Technical

Technical sustainability is met when those responsible for sustaining activities have the necessary skills and equipment. This does not happen if there is no attempt at skills transfer. For example, *YEEP* provided the Ministry of Youth Affairs with six foreign experts who did not pursue knowledge transfer. The end of that support returned the Ministry to its original deficient state (Adablah and Bockarie, 2018: 30). The problem was exacerbated by UNDP's supposed micro-management of the project, so there was little opportunity for learning by doing.

The *Integrated Youth Development Activity* project run by USAID suffered from weak sustainability both because it trained a volunteer teaching force rather than regular teachers, with these volunteers not employed beyond the project, and the "curriculum cascade" through training of trainers did not function (USAID, 2022).

In contrast, the evaluation of *Youth Employment for Sustainable Development* in Kenya noted that sustainability was likely given the mainstreaming training capacity for the two technologies in the local training institutions (Karuga, 2012a: p.33). The volunteers in the NYVS programme initiated community development projects in Loya county (Liberia) by assimilating themselves within the existing local participatory and civil society clusters. NYVS volunteers acted as resource persons within local "clusters" which included an NGO committee, and the "protection cluster" which addressed gendered violence and criminal justice. This way they ensured a knowledge and skills transfer to these groups to help sustain the gains from the programme. As one member suggested (Matos et al., 2008).

Financial

Financial sustainability is ensured by making funds available to continue the activities. This usually means that the government commits to providing funds, although alternatives are that an activity becomes financially self-sustaining or there is a follow-on project.

Mostly, evaluations note a lack of financial sustainability. For example:

- The lack of counterpart funding for the *YEEP* does not auger well for the programme's sustainability *(*Adablah and Bockarie, 2019: p.27)

- The general lack of financial and human resources makes sustainability an important issue that will require attention from the government (Republic of South Sudan, RSS) and youth and women associations that own the facilities. For instance, *RSS Vocational Training Centre* (*VTC*) in Juba is functioning with donor support, something common to all vocational training centres that are operated by *RSS* and state governments. Only NGO and faith-based operated vocational training centres are functioning to some extent (Carravilla, 2011: p.34)

- Community Processing Centres (CPCs) in a vocational training project in Guinea were not financially sustainable as they did not generate sufficient funds to cover their costs, and the trainers were required to hand over 40% of their profits to the CPC - but they had their own workshops in town where they could operate without this charge (Diouf et al., 2017: p.22).
- Government officials in Mozambique worried about sustaining the YEP gains with the end of external financing. As one government representative noted: "after the project we will have trainers that have been formed: we had three of our staff formed. We would like to find other partners to set up further trainings, now that we have the trainers, but we will need to find funding." The paid internships in the construction sector offered under YEP also faced a similar situation as enterprises and youth organisations would not be able to ensure remuneration in the absence of external financing. (Nunez, 2010: p.28)

Financial sustainability can be undermined by project business models which give stuff away for free. In other cases, a project may provide material free of charge, but beneficiaries will no longer be able to afford it once the project ends. In a vocational training project in Guinea beneficiaries were provided with imported coconut oil for agro-processing but this was not sustainable as the supply from Benin may be disrupted and was, anyway, unaffordable (Diouf et al., 2017: p.24).

But there are exceptions, such as financial sustainability for the SMEs supported by a roads project that was improved by the Kenyan Ministry of Road and Road Agencies stating that 10% of procurement from the road's rehabilitation budget should go to young contractors (Karuga, 2012a: p.33). And in another case in Somalia maintenance of facilities was built into local budgets (Shumba et al., 2019).

The Internal Savings and Lendings Scheme (ISAL) initiative under *Children First* in Zimbabwe trained groups of ten to put in money and create a 'revolving loan fund', which would eventually be returned with interest to the members. Although groups struggled to pursue this considering the lack of start-up capital, the successful groups had an important policy recommendation to sustain the programme: "Once a group is well established and has earned interest on its principal investment, the group can use that interest as a scholarship to invite a vulnerable person without cash to join the group. The pooled interest can be used both for the initial membership payment and also for the first loan to the new member. This initial loan might be for a smaller amount than the pooled amount that is circulating monthly. That way, if the new member is not successful for any reason the group will not have lost its core profits. More experienced members can mentor younger or less experienced members as they build their businesses." (Mcsmith, 2013: p.27)

9. Implications of study findings

9.1 Implications for policy and practice

The most important finding – consistent with that reported in other reviews –is that effects of youth employment interventions on employment, skills and earnings are not large. But they do vary. Some interventions are more effective than others, notably apprenticeships, and public works appear promising. And multi-component interventions are more effective than single component measures: training should be offered in combination with finance if youth are expected to go into self-employment, or other forms of employment support otherwise. It is also important that interventions are of sufficient duration to impart the intended skills.

Key takeaway

A stronger evidence base is needed to identify effective solutions to tackle the problem of youth employment in sub-Saharan Africa.

The main findings are that:

- Apprenticeships are found to be effective. Another finding of this report are the benefits of working with existing systems. Hence, projects which support traditional apprenticeships with master craftspeople are more cost effective and sustainable. This is one of the few interventions which has a pathway into employment.

- Certification of training appears important as a means of signalling a young person's employability to potential employers. Certificates should come from a trusted source. Hence, developing national certification schemes, including for apprenticeships, would appear beneficial but these have not been properly evaluated, and it is not clear that the institutional capacity exists to support them.

- Also promising are public works programmes, though, other than in South Africa, they are currently restricted to crisis settings. Public works should be tried and tested more widely outside of conflict settings.

- Technical and vocational training alone is one of the weakest interventions. In contrast, apprenticeship programmes have a larger than average effect.

- Wage subsidies do not have a large impact and appear suitable in the SSA context.

- Many youth employment programmes are for the better educated, and they are often the main beneficiaries even if that is not the intention. Reaching more disadvantaged groups often proves challenging, requiring more active targeting and outreach. This situation is not helped by an apparent urban bias, which brings along a typical neglect of agriculture. Around 60% of youth depend on agriculture for their livelihood, but it is the focus of only around one quarter of interventions.

- There is varying success in female participation. Gender-sensitive design features, such as safe transport, appropriate scheduling, and offering childcare facilities appear to be effective. Attempts to change social norms appear less effective. But all these approaches have not been rigorously evaluated.

- The list of implementation challenges come as no surprise, and are not unique to youth employment. A bit of realism about project start up times would avoid the adverse consequences of delays.

- As shown by the facilitators of implementation, working closely with government, or using other local systems, may help address these challenges. The other issues for donors to address are not having too many agencies, often with overlapping responsibilities, in a single project and to simplify procurement procedures.

- Sustainability needs to be taken more seriously. The neglect of sustainability planning is a common finding. Once again, good relationships with, and utilizing, local delivery channels will be a main way to address this issue.

9.2 Implications for research

Whilst the evidence base is quite large, it is geographically concentrated, as well as by subject. More studies are needed from a broader range of countries. Key areas for further research are:

- There are also gaps in the questions being addressed. Most notable is the lack of long-run studies. Study design should include tracing systems, and research funders support such long-run studies.

- Given the evidence in favour of multi-component interventions it would be beneficial to have studies employing a factorial design to assess which combinations of interventions are most successful. Factorial deigns have three treatment arms: A, B and A+B. There may also be an untreated control arm.

- Studies may also employ A/B designs to assess design feature of interventions such as different targeting and outreach mechanisms. Such designs can be used for adaptive learning impact evaluations, using evidence to steer mid-course corrections during programme implementation.

- Another gap is the relative lack of studies of interventions at scale. Many studies are small-scale, often referring to researcher-designed interventions. The need is for studies of actual interventions being implemented by governments and NGOs at scale.

- Many of the studies have issues with evaluation design or implementation. For process evaluations there is frequently a lack of an explicit methodology for analysis. For impact evaluations common issues are lack of power calculations to determine sample size, failure to report differential attrition and inadequate description of the intervention.

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Annex 1 Coding matrix for implementation issues

This annex shows the qualitative coding matrix, listing the themes and sub-themes which were identified, and the reports mentioning these sub-themes. The discussion of these issues is presented in Chapter 6).

Table A1.1: Implementation issues of youth employment interventions

Themes	Sub-themes	References
Challenges		
Project delays	- Slow disbursement of funds to project activities. - Lengthy/challenging procurement and payment processes. - Postponement of implementation activities - High turnover of government ministers, provincial governors. - Lack of support by government officials due to lack of incentives. - Delays caused by political elections that have occurred during the life of the projects. - Slow project rollout - (delayed recruitment of trainers, setting up and structuring technical committees). - Cumbersome administrative procedures. - Reduction in stakeholders' interest in the project. - Frequent changes government MDAs takes away leadership. - Non-adherence to schedules by Implementing organizations.	Adablah (2018) Arif (2018) Carravilla (2018) ILO (2022) Zulu (2015) Arowolo et al. (2015) Cherukupalli (2019) Cook and Younis (2012) Arowolo (2012) Karuga (2012) Shumba (2019)
Insufficient time	- Insufficient project implementation time lines.	Karuga (2012) ILO (2022) USAID (2022) Kundi (2015) Lyby (n.d.)
Poor coordination	- Weak exchange of information between the SPCUs - Development partners did not understand their roles and responsibilities. - Insufficient communication among players. - Lack of communication and information sharing. - Poor understanding of the project scope and planned activities. - Lack coordination in the youth sector both amongst govt and amongst development partners. - Development partner has authority to make government agencies coordinate. - Government and implementing partners do not coordinate.	Adablah (2018) Abduljabar (2015) Cook and Younis (2012) Arowolo (2012) Cherukupalli (2019) Adablah (2018) Carravilla (2011)

Themes	Sub-themes	References
	- Government work independently.	Kundi (2015) Lyby (n.d.) Shumba et al. (2019) Zulu (2015)
Absence of infrastructure	- Teaching facilities (spaces for training). - All infrastructure destroyed by civil war. - Limited sanitation. - Lack of internet access - Lack of phone. - Poor roads, few field vehicles. - No electricity supplies.	Abduljabar (2015)
Staffing issues	- Lack of staffing. - Weak staff capacity. - Need for staff training.	ILO (2022) Carravilla (2011) Ahmed (2016) Kundi (2015)
Lack of government commitment	- Reshuffles and changes in ministries, departments and agencies take away leadership. - Lack of sustained leadership due to many reshuffles of Ministers, high turnover of Governors and other relevant decision-making level staff. - Pledged government financial and technical support was not provided. - Failure to gazette training centres/institution leading to lack of legal status to secure funding locally and internationally. - Exclusion of MDAs from programme participation. - Change in government priorities.	Ahmed (2016) Arowolo (2012) Kundi (2015)
Project Implementing units (PIUs) not properly functioning.	- Insufficient skills in project management and coordination, data management, accounting, budgeting and budget management. - Weak data management system (lack of skills and appropriate software). - Lack of regular meetings. - Deviation from project terms and conditions - (Non-adherence to project objectives). - High turn-over of project staff/trainers.	Abduljabar (2015) Ahmed (2016) Cook and Younis (2012)
Shortfalls in project funding	- Government budget support not provided. - Partial funding of agreed budgets by donors. - Inability to hire sufficient staff with long term contracts. - Premature closure of training programmes or reduction in training activities due to funding constraints.	Abduljabar (2015) Ahmed (2016) Arif (2018) Arowolo (2012)

Themes	Sub-themes	References
	- Some activities in project budgets allocated inadequate funds.	Carravilla (2011) ILO (2022) Kundi (2015) Lyby and Sy (2010)
	FACILITATORS	
Good government support	- High ownership of programmes by national actors. - Strong political, technical and leadership.	Arif (2018) Chwiara (2012) Ogada (2012) ILO (2022) Lyby (n.d) Shumba (2019) Zulu (2015)
Collaborations and partnerships	- Existence of collaboration and partnerships (public sector, private sector and international development partners). Effective consultation and follow-up with prospective and actual partners. - Existence of effective management and coordination mechanisms. - Strong engagement and ownership of project. - Presence of active involvement of stakeholders (stakeholder engagement.	Simmons et al. (2015) Arowolo (2012) Arif (2018) Ogada and Arunga (2012) ILO (2022) USAID (2022) IOM (2019) Kundi (2015) Lyby (n.d.)
Stakeholder engagement	- Presence of active involvement of stakeholders.	Arif (2018) Arowolo et al. (2015) ILO (2022) USAID (2022) Ogada and Arunga (2012) Karuga (2012)
Additional Support	- Guidance from project officers and host institutions.	Matos et al. (2008)

Annex 2 Descriptive statistics

This mixed method review is based on studies the Youth Employment Evidence and Gap Map (EGM). The EGM contains 212 evaluations from SSA. This annex presents an overview of the characteristics of these studies from the EGM coding. This information is used in assessing the evidence base interventions to support youth employment in SSA.

Key features are:

- Roughly equal numbers of impact evaluations and process evaluations, with a slightly higher proportion of the latter. Few systematic reviews, reflecting the fact that youth employment is an "under-reviewed topic".
- Around half of the interventions studied target disadvantaged youth. But a bit fewer than a quarter are concerned with the agricultural sector.
- The majority of interventions are multi-component.
- Training, up-skilling and retraining/ re-skilling is the largest intervention category, being part of 80% of the interventions studied. Within that category, TVET is the largest sub-category. Business skills training is also important, being part of around 40% of interventions. Finance and financial incentives is the second largest intervention category.
- About one-quarter of the interventions have a gender orientation.
- Employment is the most commonly reported outcome, with the largest sub-category being employment status (in employment or not), followed by earnings. Few studies report an economic analysis.

A more comprehensive discussion of the EGM is in the companion EGM report (Apunyo et al., forthcoming).

Descriptive statistics – Youth employment interventions in Sub Saharan Africa

Table A2.1: Characteristics of studies included in review

Code	Sub-codes	Number of studies
Study type	Impact evaluation	99
	Process evaluation	111
	Systematic review	2
Social status of youth	Youth in fragility, conflict and violence (FCV) context	39
	Youth with disabilities	26
	Youth from disadvantaged background (low income families or low education)	119
	Criminal background	2
	Humanitarian settings	16
	Majority Ethnic minority	1
	Includes ethnic minority	5
Digital technology	Technical and vocational skills	18
	Job search/ job matching	8
	Digital instruction	2
Sector	Agriculture	50
	Services	56

Code	Sub-codes	Number of studies
	Industry: Non-Manufacturing	44
	Industry: Manufacturing	25
	Sector irrelevant or unreported	123
Multi-component	Single component	40
	Multi-component across categories	152
	Multi-component within category	23

Table A2.2: Intervention categories and sub-categories of the studies included in the review

Code	Sub-codes	Number of studies
Intervention broad categories	Training, up-skilling and retraining/ re-skilling	171
	Support to employment	55
	Decent work policies	41
	Labour market information systems	23
	Private sector development	50
	Finance and financial incentives	88
	Cross cutting	62
Training, up-skilling and retraining/ re-skilling sub categories	Education, technical and vocational training (TVET)	119
	Internship and apprenticeship	43
	Training centre accreditation and certification	13
	Training of trainers and teachers	35
	Business skills training	86
	Life skills training	44
	Prior Learning Assessment and Recognition (PLAR)	1
	None of these	41
Support to employment - sub categories	Employee Mentoring (Work integrated learning, OTJ mentoring)	24
	Programme for overseas employment	0
	Support to employee job search (incl. matching, placements and transport subsidies)	35
	Public work programs	12
	Regional economic development	1
	None of these	157
Decent work policies - sub categories	Social protection and social security	14
	Institutions and accountability	26
	Policy and labour standards	21
	None of these	171
Labour market information systems - sub categories	Labour market trends analysis	4
	Digital services and SMS coaching	3
	Social media campaigns and awareness campaigns	3
	Career offices/advisory services/career days/job fairs	18
	None of these	189

Code	Sub-codes	Number of studies
Private sector development- sub categories	Business mentoring	26
	Formalisation	7
	Access to services and markets (value chains)	8
	Green and circular economy	6
	Value chain development	16
	None of these	162
Finance and financial incentives- sub categories	Micro, small and medium sized Enterprise credit (MSME)	38
	Social impact bonds	0
	Crowdfunding	3
	Loan guarantees	4
	Grants and in kind	55
	Savings groups	9
	Micro-franchising	3
	Wage subsidies	13
	Tax, trade and investment climate	2
	None of these	124
Cross-cutting - sub categories	Youth outreach	8
	Gender	58
	None of these	150

Table A2.3: Outcome categories and sub-categories of the studies included in the review

Code	Sub-codes	Number of studies
Outcome broad categories	Education & skills	30
	Employment	88
	Welfare	54
	Entrepreneurship	41
	Economic measures	33
	Design and implementation	108
	None of these	0
Education outcome sub categories	Education completion & qualification	4
	Access to/ in education	5
	Education quality	3
	Technical & vocational skills	14
	Digital skills	1
	Transferable skills (plus life skills)	10
	None of these	182
Employment outcome sub categories	Employment status (& duration)	77
	Hours worked	41
	Earnings	58
	Actively seeking employment	11
	Employment expectation	7
	Appropriate employment	4
	Job quality	25
	Vacancies	0
	None of these	124
Welfare outcomes sub categories	Economic outcomes (minus earnings).	38
	Anti-social and offending behaviour	9
	Citizenship and values	25
	Family health & education	25
	Inclusion & empowerment	24
	None of these	158
Entrepreneurship outcomes sub categories	Financial services access	12
	Business creation	32
	Business performance	15
	Job creation	6
	None of these	171
Economic measures outcome sub categories	Costs	20
	Cost-benefit	7
	Cost-effectiveness	9
	Multiplier & spill over effects	4
	None of these	179
	Design	81

Code	Sub-codes	Number of studies
Design and implementation outcomes sub category	Theory of change	42
	Barriers and Facilitators to Participation	52
	Design issues	53
	Implementation issues	82
	Causal processes	36
	Barriers and Facilitators for Outcomes	69
	Sustainability	76
	None of these	104

Annex 3 Descriptive analysis of impact evaluations

Our quantitative review includes 85 impact evaluations (listed in Table A3.2),[11] from which we coded 6,275 effect sizes. This annex gives a descriptive overview all of the 85 studies. The coding comes mostly from the EGM with the exceptions of interventions and outcomes for which the team developed a more detailed typology.

Key features are from this coding are that:

- Impact evaluations study interventions in a limited number of countries, with the largest number being from Uganda (17 studies), South Africa (16) and Ethiopia (10).
- Experimental study designs (randomized controlled trials) are the most common design, being used in 82% of cases (70 out of 86 studies). Critical appraisal shows roughly half studies to be rated as low confidence in study findings, largely because of attrition.
- The most common setting for interventions is school (40 studies) and training centres (36 studies).
- Most interventions are mixed sex, though a sizeable number (13 studies) are of interventions for females only, compared to very few (3 studies) for males only.
- Duration varies with a quarter of studies being of interventions of brief duration (less than 1 month), one quarter being of medium duration (1-6 months) and about just over one third being long duration of over 12 months. A small share are 6-12 months.
- As reported in Annex 2, employment and earnings are the main outcomes. Over one-third of studies include psycho-social outcomes. Skills are less measured than might be expected given the preponderance of skills-building interventions, especially technical skills.
- The number of effect sizes mirrors the distribution of interventions and outcomes. Of the 6,275 coded effect sizes, 4,237 are for training interventions, of which 2,369 concern TVET and 2,300 business skills training interventions. A total of 1,886 effect sizes are for employment outcomes. Skills and psychosocial outcomes have a disproportionate share of effect sizes (1,075 and 1,005 respectively) compared to their share of outcomes, as many studies have multiple measures for these outcomes.

[11] Not all of the impact evaluations included in the EGM report the necessary statistics to be included in the meta-analysis. Thirteen studies were dropped for this reason.

Descriptive statistics from the impact evaluations studies youth employment interventions in Sub-Saharan Africa

Table A3.1: Descriptive characteristics of the impact evaluations included in the review

Variable	Number of studies		Variable	Number of studies
Review Characteristics	**#**		**Number of Studies**	85
Income classification			**Country**	
Low income	51		Cameroon	1
Lower-middle income	18		Côte d'Ivoire	4
Upper-middle income	16		Ethiopia	10
			Ghana	4
Study Design			Kenya	8
Experimental	70		Liberia	2
Non-experimental matching	12		Malawi	4
Other regression/ITT	3		Nigeria	5
Study Quality			Rwanda	6
Low quality primary study	44		Sierra Leone	4
Medium and high quality primary study	41		South Africa	16
			South Sudan	1
Implementer			Tanzania	1
Government	33		Uganda	17
Multilateral	5		Zimbabwe	2
NGO	19		**Populations**	
Private Sector	3		Youth aged 15-19	70
Researchers	12		Youth aged 20-24	71
Not reported/other	13		Youth aged 25-29	59
			Youth aged 30-35	40
Setting			Age not reported	9
Firm	40		Male only	3
High School	3		Female only	13
Tertiary Education	5		Both male and female	74
Training Centre	36		Gender not reported	1
Community	10		Urban	70
Other	17		Rural	58
			Urban/Rural not reported	22
Sector			Youth with disability	1
Irrelevant/unreported	50		Youth in fragility,	3
Agriculture	15		conflict and violence	
Manufacturing	11		Youth from disadvantaged background	31
Non-manufacturing	18		(low income families or low education)	
Services	25		Humanitarian settings	3

Variable	Number of studies		Variable	Number of studies
Intervention Duration			**Time of Measurement**	
1. Less than 1 month	21		1. Less than 1 month	3
2. Between 1 & 6 months	22		2. Between 1 & 6 months	15
3. Between 6 and 12 months	13		3. Between 6 and 12 months	27
4. More than 12 months	30		4. More than 12 months	57
5. Missing	1			
Populations not represented: criminal background, majority ethnic minority, includes ethnic minority				

Table A3.2: List of impact evaluations included in the review

Author ID	Title	Year	Country	Study Quality	Study Design
Abebe (2018)	Job Search And Labour Market Exclusion In A Growing African City	2018	Ethiopia	Medium and high quality primary study	Experimental
Abebe (2019)	Job Fairs: Matching Firms And Workers In A Field Experiment In Ethiopia	2019	Ethiopia	Medium and high quality primary study	Experimental
Abebe (2019) B	Learning Management Through Matching: A Field Experiment Using Mechanism Design	2019	Ethiopia	Low quality primary study	Experimental
Abebe (2020) A	Short-Run Welfare Impacts Of Factory Jobs	2020	Ethiopia	Medium and high quality primary study	Experimental
Abebe (2020) B	Anonymity Or Distance? Job Search And Labour Market Exclusion In A Growing Ethiopian City	2020	Ethiopia	Medium and high quality primary study	Experimental
Abebe (2021)	Matching Frictions And Distorted Beliefs: Evidence From A Job Fair Experiment	2021	Ethiopia	Medium and high quality primary study	Experimental
Abekah-Nkrumah (2019)	Duration Of High School Education And Youth Labour Market Outcomes: Evidence From A Policy Experiment In Ghana	2019	Ghana	Low quality primary study	Experimental
Abel (2019)	Bridging The Intention-Behavior Gap? The Effect Of Plan-Making Prompts On Job Search And Employment	2019	South Africa	Medium and high quality primary study	Experimental
Adoho (2014)	The Impact Of An Adolescent Girls Employment Program: The Epag Project In Liberia	2014	Liberia	Low quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Aflagah (2020)	Failed Promises Of A Wage Subsidy: Youth And South Africa's Employment Tax Incentive	2020	South Africa	Low quality primary study	Non-experimental matching
Alcid (2014)	A Randomised Controlled Trial Of Akazi Kanoze Youth In Rural Rwanda. United States Agency For International Development.	2014	Rwanda	Low quality primary study	Experimental
Alcid (2023)	Short- And Medium-Term Impacts Of Employability Training: Evidence From A Randomised Field Experiment In Rwanda	2023	Rwanda	Low quality primary study	Experimental
Alfonsi (2020)	Tackling Youth Unemployment: Evidence From A Labor Market Experiment In Uganda	2019	Uganda	Medium and high quality primary study	Experimental
Anderson (2022)	Improving Business Practices And The Boundary Of The Entrepreneur: A Randomized Experiment Comparing Training, Consulting, Insourcing, And Outsourcing	2022	Nigeria	Medium and high quality systematic review	Experimental
Ardington (2016)	Social Protection And Labor Market Outcomes Of Youth In South Africa	2016	South Africa	Low quality primary study	Non-experimental matching
Bandiera (2012)	Empowering Adolescent Girls: Evidence From A Randomised Controlled Trial In Uganda	2012	Uganda	Low quality primary study	Experimental
Bandiera (2015)	Women'S Economic Empowerment In Action: Evidence From A Randomised Control Trial In Africa	2015	Uganda	Medium and high quality primary study	Experimental
Bandiera (2020)	Women'S Empowerment In Action: Evidence From A Randomized Control Trial In Africa	2020	Uganda	Low quality primary study	Experimental
Banerjee (2020)	Spatial Mismatches And Imperfect Information In The Job Search	2020	South Africa	Low quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Beaman (2021)	Stay In The Game: A Randomized Controlled Trial Of A Sports And Life Skills Program For Vulnerable Youth In Liberia	2021	Liberia	Low quality primary study	Experimental
Berge, (2012)	Business Training In Tanzania: From Research-Driven Experiment To Local Implementation	2012	Tanzania	Low quality primary study	Experimental
Bernhardt (2017)	Household Matters: Revisiting The Returns To Capital Among Female Micro-Entrepreneurs In India	2017	Ghana	Low quality primary study	Experimental
Bertrand (2021)	Do Workfare Programs Live Up To Their Promises? Experimental Evidence From Cote D'Ivoire	2021	Côte d'Ivoire	Medium and high quality primary study	Experimental
Betancourt (2014)	A Behavioral Intervention For War-Affected Youth In Sierra Leone: A Randomized Controlled Trial	2014	Sierra Leone	Medium and high quality primary study	Experimental
Bhorat (2016)	Minimum Wages And Youth: The Case Of South Africa	2016	South Africa	Low quality primary study	Non-experimental matching
Bier (2019)	Addressing The Youth Skills Gap Through University Curricula: Evidence From A Quasi-Experimental Evaluation In Rwanda	2019	Rwanda	Low quality primary study	Non-experimental matching
Blattman (2011)	Employment Generation In Rural Africa: Mid-Term Results From An Experimental Evaluation Of The Youth Opportunities Program In Northern Uganda	2011	Uganda	Medium and high quality primary study	Experimental
Blattman (2013)	Credit Constraints, Occupational Choice, And The Process Of Development: Long Run Evidence From Cash Transfers In Uganda	2013	Uganda	Low quality primary study	Experimental
Blattman (2014)	Employing And Empowering Marginalized Women: A Randomized Trial Of Microenterprise Assistance	2014	Uganda	Medium and high quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Blattman (2014) B	Generating Skilled Self-Employment In Developing Countries: Experimental Evidence From Uganda.	2014	Uganda	Medium and high quality primary study	Experimental
Blattman (2016)	The Returns To Microenterprise Support Among The Ultrapoor: A Field Experiment In Postwar Uganda.	2016	Uganda	Medium and high quality primary study	Experimental
Blattman (2018)	The Long-Term Impacts Of Grants On Poverty: 9-Year Evidence From Uganda'S Youth Opportunities Program	2018	Uganda	Low quality primary study	Experimental
Blattman (2019)	Impacts Of Industrial And Entrepreneurial Jobs On Youth: 5-Year Experimental Evidence On Factory Job Offers And Cash Grants In Ethiopia	2019	Ethiopia	Medium and high quality primary study	Experimental
Blimpo (2021)	Entrepreneurship Education And Teacher Training In Rwanda	2021	Rwanda	Low quality primary study	Experimental
Botha, (2013)	Measuring The Effectiveness Of The Women Entrepreneurship Programme On Potential, Start-Up And Established Women Entrepreneurs In South Africa.	2013	South Africa	Medium and high quality primary study	Experimental
Brooks (2018)	Mentors Or Teachers? Microenterprise Training In Kenya	2018	Kenya	Medium and high quality primary study	Experimental
Brudevold-Newman (2017)	A Firm Of One'S Own: Experimental Evidence On Credit Constraints And Occupational Choice	2017	Kenya	Medium and high quality primary study	Experimental
Bukenya (2019)	Do Revolving Funds Generate Self-Employment And Increase Incomes For The Poor? Experimental Evidence From Uganda'S Youth Livelihood Programme	2019	Uganda	Medium and high quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Calderone (2017)	Are There Different Spillover Effects From Cash Transfers To Men And Women? Impacts On Investments In Education In Post-War Uganda	2017	Uganda	Medium and high quality primary study	Experimental
Chioda (2023)	Making Entrepreneurs: The Return To Training Youth In Hard Versus Soft Business Skills| Cedil Research Project Paper 11, Uganda	2023	Uganda	Medium and high quality primary study	Experimental
Cho (2013)	Differential Effects Of Vocational Training On Men And Women And The Challenge Of Program Dropouts And Attrition In Malawi	2013	Malawi	Low quality primary study	Experimental
Cho (2015)	Differences In The Effects Of Vocational Training On Men And Women : Constraints On Women And Drop-Out Behaviour	2015	Malawi	Low quality primary study	Experimental
Croke (2023)	The Role Of Skills And Gender Norms In Sector Switches: Experimental Evidence From A Job Training Program In Nigeria	2023	Nigeria	Medium and high quality primary study	Experimental
Crépon (2018)	Creating New Positions? Direct And Indirect Effects Of A Subsidized Apprenticeship Program	2018	Côte d'Ivoire	Medium and high quality primary study	Experimental
Crépon (2019)	The Direct And Indirect Effects Of A Dual Apprenticeship Program In CôTe D'Ivoire	2019	Côte d'Ivoire	Medium and high quality primary study	Experimental
De Azevedo (2013)	Testing What Works In Youth Employment: Evaluating Kenya'S Ninaweza Program.	2013	Kenya	Medium and high quality primary study	Experimental
Domenella (2021)	Can Business Grants Mitigate A Crisis? Evidence From Youth Entrepreneurs In Kenya During Covid-19	2021	Kenya	Medium and high quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Ebrahim (2017)	The Effects Of The Employment Tax Incentive On South African Employment	2017	South Africa	Low quality primary study	Non-experimental matching
Ebrahim (2019)	Can A Wage Subsidy System Help Reduce 50 Per Cent Youth Unemployment? Evidence From South Africa	2019	South Africa	Low quality primary study	Other regression; ITT
Ebrahim (2022)	A Policy For The Jobless Youth In South Africa: Individual Impacts Of The Employment Tax Incentive	2022	South Africa	Low quality primary study	Experimental
Fiala (2014)	Stimulating Microenterprise Growth: Results From A Loans, Grants And Training Experiment In Uganda.	2014	Uganda	Medium and high quality primary study	Experimental
Franklin (2016)	Location, Search Costs, And Youth Unemployment: Experimental Evidence From Transport Subsidies In Addis Ababa	2016	Ethiopia	Medium and high quality primary study	Experimental
Fukunishi (2017)	Vocational Education And Employment Outcomes In Ethiopia: Displacement Effects In Local Labor Markets	2017	Ethiopia	Low quality primary study	Other regression
Godlonton (2016)	Employment Exposure: Employment And Wage Effects In Urban Malawi (Working Paper).	2016	Malawi	Medium and high quality primary study	Experimental
Graham (2019)	Siyakha Youth Assetsstudy: Developing Youth Assets For Employability, South Africa	2019	South Africa	Low quality primary study	Experimental
Hardy (2019)	The Apprenticeship-To-Work Transition: Experimental Evidence From Ghana	2019	Ghana	Low quality primary study	Experimental
Hicks (2016)	Evaluating The Impact Of Vocational Education Vouchers On Out-Of-School Youth In Kenya	2013	Kenya	Low quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Highfill (2017)	Building Capacity Of Rural Youth And Extension Workers In Agriculture As A Business: Evidence From A Field Experiment In Malawi	2017	Malawi	Low quality primary study	Experimental
Honorati (2015)	The Impact Of Private Sector Internship And Training On Urban Youth In Kenya.	2015	Kenya	Low quality primary study	Experimental
James (2018)	Impact Evaluation Report Zimbabwe: Works	2018	Zimbabwe	Low quality primary study	Experimental
Jamison (2014)	Financial Education And Access To Savings Accounts: Complements Or Substitutes? Evidence From Ugandan Youth Clubs	2014	Uganda	Low quality primary study	Experimental
Kazue (2017)	TVET As The Last Educational Chance: Employability And Family Background Of Ethiopian Urban Youth	2017	Ethiopia	Low quality primary study	Non-experimental matching
Kimou (2019)	Youth Employability And Peacebuilding In Post-Conflict CôTe D'Ivoire: Evidence From A Randomized Controlled Trial In Africa	2019	Côte d'Ivoire	Low quality primary study	Experimental
Kolade (2016)	An Idle Hand Is The Devil'S Workshop: Evaluating The Impact Of Entrepreneurship Education In Conflict-Ridden Northern Nigeria	2016	Nigeria	Low quality primary study	Experimental
Lachaud (2018)	The Impact Of Agri-Business Skills Training In Zimbabwe: An Evaluation Of The Training For Rural Economic Empowerment (Tree) Programme	2018	Zimbabwe	Medium and high quality primary study	Non-experimental matching
Levinsohn (2014)	A Youth Wage Subsidy Experiment For South Africa	2014	South Africa	Medium and high quality primary study	Experimental
McIntosh (2022)	Skills And Liquidity Barriers To Youth Employment: Medium-Term Evidence From A Cash Benchmarking Experiment In Rwanda	2022	Rwanda	Medium and high quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
McKenzie (2017)	Growing Markets Through Business Training For Female Entrepreneurs	2017	Kenya	Medium and high quality primary study	Experimental
McKenzie (2017) B	Identifying And Spurring High-Growth Entrepreneurship: Experimental Evidence From A Business Plan Competition	2017	Nigeria	Medium and high quality primary study	Experimental
Moeletsi (2017)	South Africa'S Youth Unemployment And The Employment Tax Incentive: An Empirical Re-Evaluation	2017	South Africa	Low quality primary study	Non-experimental matching
Müller (2019)	Broken Promises: Evaluating An Incomplete Cash Transfer Program	2019	South Sudan	Low quality primary study	Experimental
Nouffussie (2022)	Use Of Icts: What Effect On Youth Access To Employment In Cameroon?	2022	Cameroon	Low quality primary study	Experimental
Ogunmodede (2020)	Unlocking The Potential Of Agribusiness In Africa Through Youth Participation: An Impact Evaluation Of N-Power Agro Empowerment Program In Nigeria	2020	Nigeria	Low quality primary study	Other regression
Ranchhod (2015)	Estimating The Effects Of South Africa'S Youth Employment Tax Incentive – An Update	2015	South Africa	Low quality primary study	Non-experimental matching
Ranchhod (2016)	Estimating The Short Run Effects Of South Africa'S Employment Tax Incentive On Youth Employment Probabilities Using A Difference-In-Differences Approach	2016	South Africa	Medium and high quality primary study	Non-experimental matching
Rankin (2014)	The Success Of Learnerships? Lessons From South Africa’s Training And Education Programme	2014	South Africa	Low quality primary study	Non-experimental matching
Rosas (2016)	Can You Work It? Evidence On The Productive Potential Of Public Works From A Youth Employment Program In Sierra Leone	2016	Sierra Leone	Low quality primary study	Experimental

Author ID	Title	Year	Country	Study Quality	Study Design
Rosas (2017)	They Got Mad Skills: The Effects Of Training On Youth Employability And Resilience To The Ebola Shock	2017	Sierra Leone	Medium and high quality primary study	Experimental
Rosas (2022)	Starting Points Matter: Cash Plus Training Effects On Youth Entrepreneurship, Skills, And Resilience During An Epidemic In Sierra Leone	2022	Sierra Leone	Medium and high quality primary study	Experimental
Rotheram-Borus (2011)	Vocational Training With HIV Prevention For Ugandan Youth. Aids And Behavior	2011	Uganda	Medium and high quality primary study	Experimental
Ssekandi (2016)	Beyond Technical Skills Training: The Impact Of Credit Counselling On Entrepreneurial Behavior Of Ugandan Youth	2016	Uganda	Medium and high quality primary study	Experimental
Taqeem (2017)	Evaluating The Results Of An Agricultural Cooperative Support Programme: Business Practices, Access To Finance, Youth Employment	2017	Rwanda	Low quality primary study	Non-experimental matching
Unnikrishnan (2022)	Impact Of An USAIDted Youth Skill Training Program On Youth Livelihoods: A Case Study Of Cocoa Belt Region In Ghana	2022	Ghana	Low quality primary study	Experimental
Wambalaba (2021)	Effectiveness Of The Metro Agri-Food Living Lab For Gender Inclusive Youth Entrepreneurship Development In Kenya	2021	Kenya	Low quality primary study	Experimental
Wheeler (2022)	Linkedin (To) Job Opportunities: Experimental Evidence From Job Readiness Training	2022	South Africa	Medium and high quality primary study	Experimental

Table A3.3: Number of effect sizes per outcome category

Outcome category	Outcome	Number of studies	Number of effect sizes
Employment	Employment	53	778
	Labour supply	40	490
	Labour migration	9	110
	Nature of employment	40	508
Work Income	Wages and Earnings	51	664
Material welfare	Household finances	27	464
	Durable assets	12	121
	Food security	5	82
	Other household welfare measures	8	102
Skills	Skills/test scores	16	116
	Business skills/knowledge	35	612
	Life skills/soft skills	25	347
Business	Started business	19	210
	Number of employees/customers	6	64
	Financial performance/assets	20	488
Program Attendance	Program Attendance	12	90
	Program completion	5	24
Psychological	Wellbeing	25	225
	Mental health	6	53
	Psychosocial	31	727
Total no. of effect sizes			6,275

Table A3.4: Number of effect sizes extracted across intervention categories and sub-categories

Intervention categories	Sub-categories	Number of studies	Number of effect sizes	Intervention type
1. Training, up-skilling and retraining/ re-skilling	Education, technical and vocational training (TVET)	34	2369	Supply side
	Internship and apprenticeship	10	565	Supply side
	Training of trainers and teachers	3	93	Supply side
	Business skills training	31	2330	Supply side
	Life skills training	11	1234	Supply side
2. Support to employment	Employee Mentoring (Work Integrated learning, On the job training)	7	644	Matching Supply & Demand
	Support to employee mobility (incl. transport subsidies) & placements	7	422	Supply side
	Public work programs	2	219	Demand side
3. Decent work policies	Social protection and social security	1	38	Rights and protection
	Policy and labour standards	1	30	Rights and protection
4. Labour market information systems	Digital services and SMS coaching	3	61	Supply side
	Career offices/advisory services/career days/job fairs	7	246	Matching Supply & Demand
5. Private sector development	Access to services and markets (value chains)	1	68	Demand side
	Business mentoring	3	91	Supply side
6. Finance and financial incentives	Micro, small and medium sized Enterprise credit (MSME)	3	228	Demand side
	Grants and in kind	16	1857	Demand side
	Wage subsidies	7	314	Demand side
	Tax and, trade and investment climate	4	90	Demand side
7. Cross cutting	Youth outreach	1	56	Supply side
Interventions for Youth Employment EGM: European Union Version 2022				

Table A3.5: Number of effect sizes extracted across outcome categories and sub-categories

	Number of effect sizes								
Outcome categories	**Employment**	**Earnings**	**Material welfare**	**Skills**	**Business**	**Program attendance**	**Psychological**	**N**	**N studies**
Intervention categories									
Training	1221	420	441	710	561	99	785	4237	60
Support to employment	250	132	168	298	229	29	179	1285	16
Decent work policies	56	12	0	0	0	0	0	68	2
Labour market information	103	44	4	97	6	19	24	297	9
Private sector development	18	0	0	97	44	0	0	159	3
Finance	723	243	434	356	399	38	296	2489	29
Cross-cutting	20	4	0	0	0	10	22	56	1
Total	1886	664	769	1075	762	114	1005	6275	
Intervention combinations									
1. Training	767	265	163	344	122	47	484	2192	36
1a. Training, Employment support	90	38	70	119	196	0	112	625	6
1b. Training, Labour market information	21	3	0	23	0	13	0	60	2
1c. Training, Finance	284	74	208	141	227	0	167	1101	6
1d. Training, Cross cutting	20	4	0	0	0	10	22	56	1
1e. Training, Finance, Private sector	0	0	0	34	0	0	0	34	1
1f. Training, Employment support, Finance	39	36	0	49	16	29	0	169	3
2. Employment support	121	58	98	130	17	0	67	491	6
3. Decent work policies	56	12	0	0	0	0	0	68	2
4. Labour market information	82	41	4	74	6	6	24	237	4
5. Private sector	6	0	0	29	22	0	0	57	1
6. Finance	388	133	226	98	134	9	129	1117	16
6a. Finance, Private sector	12	0	0	34	22	0	0	68	1
Total	1886	664	769	1075	762	114	1005	6275	

Table A3.6: Sample sizes

		Computed		
	Coded treatment effects	**Significance**	**SMD & Std error**	**# of independent studies**
Outcome category				
Employment	1,886	1,886	1,874	67
Earnings	664	662	662	51
Material welfare	769	767	767	34
Skills	1,075	1,069	1,075	53
Business	762	757	759	30
Program attendance	114	114	114	12
Psychosocial	1,005	999	1,002	38
Evaluation follow up				
Less than or = to 1 year	3,214	3,201	3,207	53
Longer than 1 year	3,061	3,053	3,046	32
Intervention category				
Training	4,237	4,219	4,230	60
Support to employment	1,285	1,285	1,285	16
Decent work policies	68	68	68	2
Labour market information systems	297	297	297	9
Private sector development	159	159	159	3
Finance & financial incentives	2,489	2,486	2,474	29
Cross-cutting	56	56	56	1
Total	6275	6254	6253	85

Table A3.7: Effect sizes by individual intervention and aggregate outcome category

Outcome categories	Employment	Work Income	Material welfare	Skills	Business	Program Attendance	Psychological	Total
Interventions								
1. Training, up-skilling and retraining/ re-skilling								
TVET	764	280	315	326	199	71	414	2369
Internship/apprenticeship	296	92	12	90	1	54	20	565
Teacher training	4	5	0	79	3	2	0	93
Business skills training	641	173	254	368	468	23	403	2330
Life skills training	317	100	74	143	152	32	416	1234
Support to employment								
Employee Mentoring	86	44	58	165	214	29	48	644
Support to employee mobility & placements	136	69	23	113	6	0	75	422
Public work programs	28	19	87	20	9	0	56	219
Decent work policies								
Social protection and social security	38	0	0	0	0	0	0	38
Policy and labour standards	18	12	0	0	0	0	0	30
Labour market information systems								
Digital services	34	0	0	20	0	6	1	61
Career offices/advisory services/career days/job fairs	75	44	4	81	6	13	23	246
Private sector development								
Access to services and markets	12	0	0	34	22	0	0	68
Business mentoring	6	0	0	63	22	0	0	91
Finance and financial incentives								
MSME Credit	13	14	32	44	120	5	0	228
Grants and in kind	482	188	402	223	257	9	296	1857
Wage subsidies	138	41	0	89	22	24	0	314
Tax, trade, investment climate	90	0	0	0	0	0	0	90
Cross cutting								
Youth outreach	20	4	0	0	0	10	22	56
Number of effect sizes	1886	664	769	1075	762	114	1005	6275

Annex 4 Results from meta-analysis

This annex presents the main findings from the meta-analysis.

Meta analysis – Youth employment interventions in Sub Saharan Africa

The table below shows the average effect size across all interventions on the outcomes shown, which are listed by category and then sub-category. The other statistics shown are: p = prob. value e.g. p<0.05 indicates that the effect size is statistically significant at the 5% level; **I^2** is a measure of heterogeneity, with I^2>80% indicating high heterogeneity and 60-80% moderate heterogeneity; Q is another measure of heterogeneity where pQ is the prob. value of that statistic, and N is the number of studies from which effect sizes are used.

As reported in the text, the main finding is that the overall effect size of all interventions on employment is small (g=0.07). The effect on other outcomes is also small with the exceptions of business outcomes (g=0.19) and programme attendance (g=0.38). There are only small, statistically insignificant, effects on welfare outcomes.

Disaggregating employment outcomes we see that there is no effect on migration from youth employment interventions. There is a slightly larger effect on nature of employment as several studies report that some participants move from informal to formal employment.

Table A4.1: Meta analysis

Outcome categories	Effect size	p	I^2	Q	pQ	N
Employment	0.07	0.00	97.9	365.8	0.00	67
Income	0.08	0.00	99.4	375.4	0.00	51
Material wellbeing	0.06	0.00	65.5	91.4	0.00	34
Skills	0.19	0.00	95.8	1028.5	0.00	53
Business	0.09	0.00	90.9	237.0	0.00	30
Program attendance	0.36	0.00	98.1	512.9	0.00	12
Psychological	0.03	0.00	5.7	39.4	0.36	38
Individual outcomes						
Employment	0.06	0.00	99.0	323.6	0.00	53
Labour supply	0.07	0.00	80.8	143.0	0.00	40
Labour migration	-0.01	0.50	0.03	6.67	0.57	9
Nature of employment	0.10	0.00	93.4	378.5	0.00	40
Wages and Earnings	0.08	0.00	99.4	375.4	0.00	51
Household finances	0.07	0.00	77.3	103.5	0.00	27
Durable assets	0.08	0.00	45.1	20.9	0.03	12
Food security	0.13	0.01	81.7	22.0	0.00	5
Other household welfare measures	0.03	0.07	12.5	8.6	0.28	8
Skills/test scores	0.16	0.01	96.5	335.7	0.00	16
Business skills/knowledge	0.18	0.00	96.6	753.3	0.00	35
Life skills/soft skills	0.13	0.00	93.4	294.0	0.00	25
Started business	0.12	0.00	93.1	166.5	0.00	19
Number of employees/customers	0.11	0.00	71.6	15.9	0.01	6
Financial performance/assets	0.08	0.00	84.3	107.5	0.00	20

Outcome categories	Effect size	p	I^2	Q	pQ	N
Program Attendance	0.39	0.00	98.4	572.5	0.00	12
Program completion	0.00	0.96	76.15	15.54	0.00	5
Wellbeing	0.06	0.00	49.9	51.1	0.00	25
Mental health	0.04	0.08	0.00	2.15	0.83	6
Psychosocial	0.02	0.00	0.0	27.2	0.61	31

The table below compares the effect sizes of bundled (multicomponent) interventions to unbundled (single component). It can be seen that generally multicomponent interventions have a larger effect size; for example g=0.12 versus 0.03 for employment. The exception is skills/test scores for which single components performs best (g=0.16 versus 0.11).

Table A4.2: Meta analysis – bundled categories

Individual outcomes	Effect size	p	I squared	Q	pQ	N
Bundled						
Employment	0.12	0.00	92.0	112.7	0.00	22
Labour supply	0.12	0.01	91.2	101.5	0.00	17
Labour migration	0.00	0.73	0.00	0.26	0.61	2
Nature of employment	0.12	0.00	80.9	65.0	0.00	15
Wages and Earnings	0.10	0.00	81.0	101.8	0.00	24
Household finances	0.10	0.00	89.6	107.6	0.00	16
Durable assets	0.12	0.00	84.1	33.5	0.00	8
Food security	0.16	0.00	72.2	10.1	0.02	4
Other household welfare measures	0.03	0.11	23.4	5.4	0.25	5
Skills/test scores	0.10	0.14	93.7	24.5	0.00	6
Business skills/knowledge	0.10	0.00	68.5	54.5	0.00	17
Life skills/soft skills	0.17	0.07	94.7	100.5	0.00	6
Started business	0.22	0.01	97.3	187.2	0.00	13
Number of employees/customers	0.12	0.03	82.3	14.5	0.00	4
Financial performance/assets	0.09	0.01	74.7	26.7	0.00	8
Program Attendance	0.49	0.00	98.5	462.1	0.00	7
Program completion	0.06	0.28	0.00	0.03	0.86	2
Wellbeing	0.07	0.00	51.6	18.7	0.03	10
Mental health	0.03	0.31	0.02	0.92	0.63	3
Psychosocial	0.03	0.00	32.4	22.0	0.11	16
Unbundled						
Employment	0.03	0.00	95.7	124.1	0.00	36
Labour supply	0.06	0.00	79.5	91.8	0.00	30
Labour migration	-0.01	0.55	0.01	6.40	0.38	7
Nature of employment	0.09	0.00	93.5	341.6	0.00	31
Wages and Earnings	0.06	0.01	99.7	198.1	0.00	33
Household finances	0.05	0.03	56.0	37.1	0.00	17
Durable assets	0.10	0.01	73.5	19.4	0.00	6
Food security	0.11	0.18	83.5	9.9	0.01	3
Other household welfare measures	0.03	0.17	0.00	4.77	0.31	5

Individual outcomes	Effect size	p	I squared	Q	pQ	N
Skills/test scores	0.16	0.03	96.8	296.8	0.00	11
Business skills/knowledge	0.21	0.00	96.7	639.7	0.00	22
Life skills/soft skills	0.11	0.00	91.8	176.9	0.00	22
Started business	0.12	0.11	95.8	306.2	0.00	13
Number of employees/customers	0.10	0.01	47.9	5.3	0.15	4
Financial performance/assets	0.07	0.02	83.9	91.1	0.00	16
Program Attendance	0.19	0.21	97.5	132.2	0.00	7
Program completion	-0.04	0.61	84.2	17.3	0.00	4
Wellbeing	0.05	0.02	59.3	42.7	0.00	18
Mental health	0.04	0.13	0.01	1.19	0.75	4
Psychosocial	0.00	0.68	0.01	5.32	1.00	18

Table A4.3. Effect size by intervention by low-income target group and other

	Employment		Income		Skills	
	Low-income	Other	Low-income	Other	Low-income	Other
Training	0.07	0.07	0.02	0.02	0.13	..
Training & employment support	0.12	..	..	..	0.05	..
Training & finance	0.07	0.04	0.04	..	0.05	0.24
Employment support	0.06	..	0.06	..	0.02	..
Labour market information	0.02	..	0.04	..	0.01	..
Finance	0.11	0.04	0.07	0.08	0.06	..

Meta regressions by intervention category and interactions

A meta-regression is an inverse-variance weighted least squares regression equation in which the dependent variable is the effect size. Unlike the sub-group analysis reported above, it controls for all confounding variables and so gives a more accurate picture of the role of moderators. Interventions are divided into three categories – training, finance and support.[12]

The first regression is the simplest model with no interactions. All intervention categories have a significant effect, with that from finance being the largest. Consistent with the argument above, bundling increases the effect size. Unusually, higher quality studies find a larger effect – a finding which hold across most model specifications.

The second equation includes all outcomes in the dependent variable with interaction terms added between different categories. In this model specification only finance has an effect. Training and finance combined have the largest effect. The combination of training and support only has a small, insignificant, increase in effect compared to the components alone. The coefficient of the bundling variable needs to be added to the relevant interactive component, further increasing the impact of finance and training combined.

The remaining columns show the results for each outcome category. Across equations 2-8, training alone never has a significant, positive impact – indeed it seems detrimental to some outcomes. However, in multicomponent interventions these negative effects are balanced out, leaving a small positive effect. The same is true of finance, for which any negative coefficients are more than offset showing a positive effect of finance when combined with training.

Turning to other moderators: (i) interventions in a training centre or community setting have a larger impact than those in a school or college setting (the reference category), but firms a smaller effect; (ii) female only interventions often have a smaller effect than mixed sex; (iii) more recent studies find a smaller effect; (iv) larger samples generally find a smaller effect, possibly reflecting the general finding that effects are harder to achieve at scale; (v) interventions with a longer duration generally have a larger effect; (vi) interventions targeting the disadvantaged are no less (or more) effective than those which are not so targeted; and (vii) studies of interventions in West Africa find a lower effect than studies from other parts of SSA.

[12] The equation is estimated without a constant so all three categories can be included rather than having a reference category.

Table A4.3: Meta regressions by intervention category and interactions

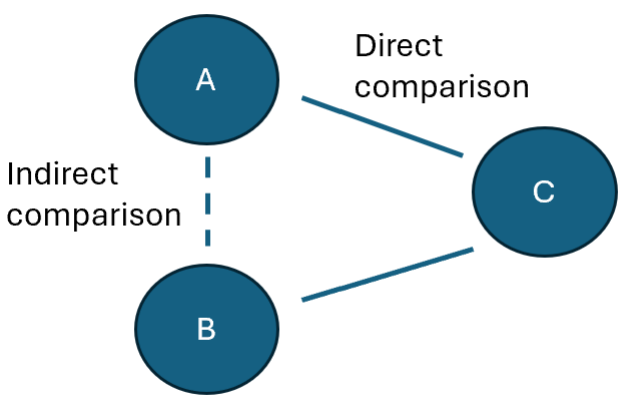
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	**Without interactions**	**All outcomes**	**Employment related outcomes**	**Wages & Earnings outcomes**	**Material Well-being**	**Skills**	**Business success**	**Psychological outcomes**
Training component	0.024*** [0.007]	0.008 [0.011]	0.018 [0.016]	-0.036 [0.023]	-0.043 [0.075]	-0.060** [0.027]	-0.107** [0.051]	-0.026 [0.024]
Finance component	0.047*** [0.006]	0.026** [0.011]	0.050*** [0.016]	-0.047** [0.023]	-0.017 [0.064]	-0.102*** [0.033]	-0.054 [0.051]	-0.024 [0.026]
Support component	0.020*** [0.007]	0.013 [0.012]	0.034* [0.018]	-0.046** [0.018]	-0.074 [0.069]	-0.067*** [0.025]	0.020 [0.057]	-0.007 [0.022]
Training*Finance		0.031** [0.014]	-0.041** [0.021]	0.041 [0.027]	0.135** [0.067]	0.080** [0.038]	0.130** [0.059]	0.021 [0.035]
Training*Support		0.003 [0.015]	-0.027 [0.025]	0.046* [0.026]	0.194*** [0.071]	0.056 [0.038]	-0.080 [0.071]	0.011 [0.024]
Female only intervention	-0.022*** [0.007]	-0.017** [0.008]	-0.005 [0.016]	-0.012 [0.017]	0.068** [0.034]	-0.089*** [0.022]	0.040 [0.026]	0.007 [0.011]
Disadvantaged	-0.001 [0.005]	-0.000 [0.005]	-0.008 [0.009]	0.037*** [0.011]	-0.005 [0.026]	0.024 [0.017]	0.016 [0.037]	-0.009 [0.008]
Medium and high quality study	0.032*** [0.006]	0.032*** [0.006]	0.024** [0.010]	0.043*** [0.012]	0.072*** [0.019]	-0.014 [0.019]	0.080*** [0.027]	0.000 [0.008]
Number of treatments in study	-0.029*** [0.003]	-0.029*** [0.003]	-0.028*** [0.006]	-0.026*** [0.007]	-0.019* [0.011]	-0.035*** [0.010]	0.028** [0.012]	0.010* [0.005]
Bundled intervention	0.017** [0.007]	0.015** [0.008]	0.046*** [0.013]	0.035** [0.016]	-0.055* [0.029]	0.035* [0.021]	0.047 [0.036]	0.040** [0.016]
Log Evaluation Sample Size	-0.021*** [0.002]	-0.022*** [0.002]	-0.013*** [0.002]	0.005* [0.003]	0.002 [0.010]	-0.077*** [0.007]	-0.014* [0.007]	0.005 [0.006]
Log intervention duration (months)	0.007*** [0.002]	0.008*** [0.002]	-0.000 [0.003]	0.004 [0.004]	0.015** [0.007]	0.025*** [0.005]	-0.010 [0.007]	0.005 [0.004]
Measured 12+ months	-0.001 [0.005]	0.001 [0.005]	-0.002 [0.009]	-0.023** [0.012]	-0.017 [0.014]	0.031** [0.013]	-0.007 [0.023]	-0.016* [0.009]
Government	0.033*** [0.007]	0.038*** [0.008]	0.031** [0.013]	0.011 [0.019]	0.022 [0.043]	0.115*** [0.022]	0.097** [0.039]	0.013 [0.017]
NGO	0.015**	0.018***	0.033***	0.032*	0.034	0.002	0.103**	-0.007

	[0.007]	[0.007]	[0.012]	[0.017]	[0.037]	[0.022]	[0.042]	[0.019]
Firm setting	-0.024*** [0.006]	-0.023*** [0.006]	-0.040*** [0.009]	-0.027** [0.013]	-0.028 [0.024]	-0.087*** [0.018]	-0.187*** [0.035]	0.000 [0.014]
Training centre setting	0.046*** [0.005]	0.046*** [0.005]	0.011 [0.010]	0.018 [0.013]	0.031 [0.026]	-0.029** [0.014]	-0.025 [0.028]	-0.004 [0.014]
Community setting	0.050*** [0.007]	0.048*** [0.007]	0.026** [0.012]	0.018 [0.018]	0.057** [0.025]	0.092*** [0.028]	0.067** [0.029]	0.006 [0.014]
West Africa	-0.036*** [0.005]	-0.035*** [0.005]	0.004 [0.009]	-0.005 [0.015]	-0.060** [0.024]	-0.031** [0.015]	-0.034 [0.023]	0.007 [0.011]
2015-2018	0.021*** [0.007]	0.020*** [0.007]	-0.001 [0.014]	-0.013 [0.015]	0.035 [0.035]	-0.058** [0.024]	0.046 [0.033]	-0.015 [0.011]
2019-2021	-0.033*** [0.008]	-0.035*** [0.008]	-0.041*** [0.015]	-0.064*** [0.016]	0.019 [0.023]	-0.189*** [0.024]	-0.077** [0.034]	-0.034*** [0.012]
2022-2023	-0.034*** [0.008]	-0.036*** [0.009]	-0.039** [0.015]	-0.070*** [0.019]	0.036 [0.031]	-0.221*** [0.025]	-0.055* [0.030]	0.088*** [0.023]
Observations	6,219	6,219	1,868	662	767	1,058	748	1,002
Standard errors in brackets; *** p<0.01, ** p<0.05, * p<0.1								

Annex 5 Component Network Meta-analysis

It is most useful to decision-makers to compare different interventions with one another. But few primary studies do this. However, a technique called network meta-analysis allows us to conduct such an analysis. If there is a study comparing intervention A with C (which may be an untreated control group) and another comparing B with C, then network meta-analysis generates a comparison of A and B. This is shown in Figure A5.1. The data provide direct comparisons of A to C and A to B. That allows us to calculate the indirect comparisons of A to B.

Figure A5.1 Styled network



Source: Author

In Figure A5.1, A, B and C are referred to as nodes in the network. For this study we consider different combinations of interventions as nodes. That is, we conducted a component network analysis which allows comparison of different combinations of components. The full report with this analysis (Masset and Eyal, forthcoming) will be published separately.

Figure A5.2 shows the network generated by our data, in which:

TRA: training

FIN: financial interventions

INF: information

SUP: support to education

PRI: private sector development

And the + indicates combinations of these components.

Control is an untreated control. The thicker the line between two nodes then the more effect size estimates there comparing those treatment conditions. As can be seen, nearly all comparisons pass through the untreated control. The largest number of effect estimates compare training (TRA) and finance (FIN) with the control.

Figure A5.2: Full interaction network model

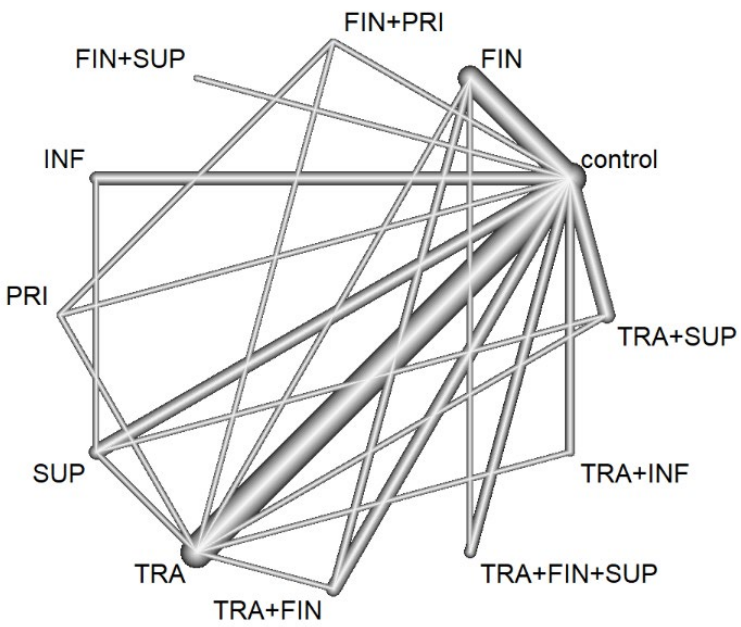
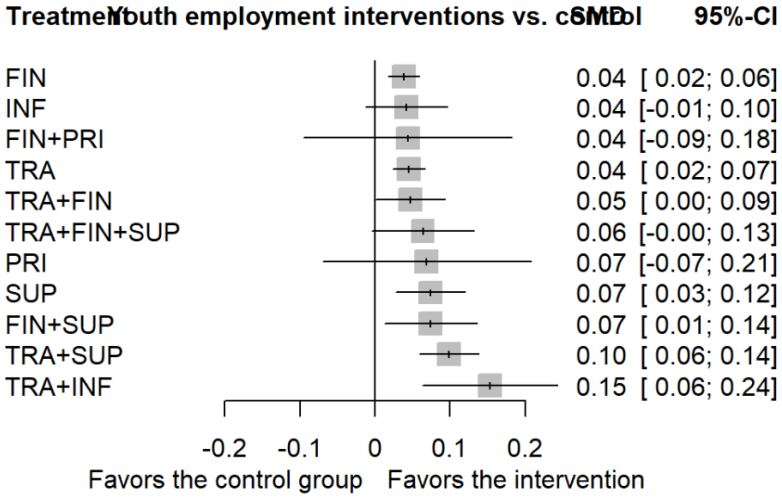


Figure A5.3 shows the results of the analysis ordered by effect size. The finding that multicomponent interventions generally outperform single component, with the largest effects being from training in combination with information intervention, followed by employment support. Training alone has an effect of just g=0.04, as do two other single component nodes.

Figure A5.3 cNMA effect sizes



Annex 6 Effect sizes by intervention type

Table A6.1 Effect sizes by intervention category (Hedge's g)

Table A6.1 shows the average effect size by the intervention categories on specific outcomes. Apprenticeships show a a large effect on skills and a moderate one on employment. They have a smaller effect on earnings – as shown in some studies, earnings may go down during the apprenticeship, but then increase. The effects from apprenticeships exceed those from TVET on all outcomes. Few effect sizes from other interventions exceed low.

Intervention	Outcome	Effect size (Hedge's g)
Technical and vocational education and training	Skills	0.15
	Employment	0.08
	Wages and earnings	0.07
Apprenticeships and internships	Skills	0.32
	Employment	0.08
	Wages and earnings	0.01
Business mentoring	Skill development	0.02
	Employment	0.04
	Business outcomes	0.05
Career advice or guidance	Employment	0.04
	Skills	0.02
	Earnings	0.08
Digital interventions	Employment	0.14
	Income	0.11
	Psychological well being	-0.04
	Skills	0.06
	Program attendance	0.36
Life skills training	Employment	0.15
	Skills	0.11
	Wages and earnings	0.07
	Business performance	0.13
	Material welfare	0.10
Public works	Business	0.07
	Earnings	0.06
	Psychological	0.02
	Employment	0.05
	Material welfare	0.01
	Skills	0.03
Wage subsidies	Employment	0.04
	Earnings	0.04