Business Mentoring

Technical Report for The Youth Employment In Sub-Saharan Africa Toolkit

Technical reports are intervention-specific summaries based a review of relevant studies from sub-Saharan Africa contained in the Youth Employment Evidence and Gap Map (EGM). This report is prepared by Ashrita Saran, Director Evaluation and Evidence Synthesis, Global Development Network and Howard White, Director, the Research and Evaluation Centre. The meta-analysis was performed by Ashrita Saran.

About this technical report

This technical report is one of a series of technical reports being produced to document the evidence base for interventions to increase youth skills and employment in sub-Saharan Africa. The report is based on relevant studies for sub-Saharan Africa contained in the Youth Employment Evidence and Gap Map (EGM).

The purpose of this report is to inform the content of the What Works for Youth Employment in sub-Saharan Africa Toolkit. This report provides results from both the quantitative evidence from impact evaluations and the qualitative evidence from process evaluations. The former is the basis for the impact rating and the latter the lessons from implementation. The critical appraisal of the studies, which was undertaken for the EGM, provides the basis for the confidence in study findings.

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Abbreviations

ADB	Asian Development bank
BDS	Business Development Supplier
CSP	Cooperative Support Programmes
Culti AFI	Cultivate Africa's Future Phase I
EGM	Evidence and Gap Map
EDC	Enterprise Development Centres
EYEE	Enhancing Youth Employability and Entrepreneurship
GEM	Growth and Employment
HDAK	Huguka Dukore Akazi Kanoze
HR	Human resource
JfYA	Youth in Africa Strategy
IP	Implementing Partner
MSMEs	Micro, Small and Medium-Sized Enterprises
NGO	Non-Governmental Organization
NNT	Number Needed to Treat
PIN	Personal Identification Numbers
PSO	Private Sector Organisations
RCT	Randomized Controlled Trial
SHG	Self Help Groups
SMD	Standardised mean difference
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisation

USAID	United States Agency for International Development
YEEP	Youth Employment and Empowerment Programme
YEF	Youth Entrepreneurship Facility

Plain language summary

What is this report about?	This report presents a summary of the English language evidence from evaluations of business mentoring programmes for youth in sub-Saharan Africa.
What are business mentoring programmes?	Business mentoring programmes pair experienced business professionals (mentors) with less experienced entrepreneurs or businesspeople (mentees) for the purpose of guidance, support, and knowledge transfer. Business mentors help mentees build skills by providing advice and feedback on their business practices. They work on setting goals for growth and may connect mentees with their network and business opportunities.
In what context are business mentoring programmes implemented?	Business mentoring programmes have been implemented in various contexts, including post-conflict environments, humanitarian crises, and economic downturns, with adaptations like virtual platforms during the COVID-19 pandemic and support for youth in challenging job markets. Mentors range from community volunteers to global business experts and mentees from young entrepreneurs to economically disadvantaged individuals.
What are the main design choices?	Design choices include: eligibility criteria for mentors, mentor training and supervision, structured versus unstructured mentoring, material to be covered during mentoring, the duration and frequency of mentoring, the number of mentees per mentor, and individual or group mentoring.
How are business mentoring programmes expected to work?	Business mentoring programmes are expected to increase youth employment by providing support to business establishment and development. They can do this by improving business skills, enhancing financial access for cooperatives, fostering inclusive agribusinesses, and strengthening intersectoral and public-private partnerships. These programmes focus on equipping young entrepreneurs with the skills, funding, and networking opportunities needed to establish or grow their businesses.
What sort of activities do business mentoring programme support?	In addition to the mentoring itself, business mentoring programmes in sub-Saharan Africa support a range of activities, including mentor training and guidance, online platforms, Enterprise Development Centers (EDCs), and Cooperative Support Programmes (CSPs).
Implementation issues	Implementation issues in youth mentoring programmes include the scarcity of qualified mentors, challenges in measuring programme effect, difficulties in securing stakeholder support, inefficiencies in

	mentor-mentee matching processes, and the need for better gender parity.
The effects of business mentoring programmes	Overall, business mentoring has a significant and a small positive effect on employment, equivalent to an 2% increase compared to a comparison group not receiving business mentoring. There is a similar positive effect on skills and a slightly smaller effect on wages and earnings. However, its effect on material well-being is not clear, and it has a negative effect on business outcomes. These findings suggest that while mentoring is beneficial in some areas, its overall effect on business performance and material well-being is not substantial. Qualitative data support the sense of self-worth and self-efficacy that results from developing small business skills and building capacity by connecting young people to role models. However, the evidence does not support that there are long-term effects.
Cost analysis	No studies report costs.
How strong is the evidence base?	There is medium confidence in the evidence of effects (four impact evaluations) and medium confidence in findings from implementation evidence (27 process evaluations).
Implications for research	More impact evaluations are needed, which can assess different design approaches including the need for longitudinal studies to understand the long-term effect of mentoring and sustain its benefits.
Implications for policy and practice	Policymakers and practitioners should develop tailored mentoring programmes for female entrepreneurs, focusing on financing, technical skills, and business knowledge, while implementing robust monitoring and evaluation frameworks to track long-term effect and make necessary adjustments. Additionally, diverse mentoring formats, including virtual mentoring, should be explored to accommodate different preferences and contexts, and resilient mentoring programmes should be established to withstand political and economic challenges through strong governance structures, fiduciary accountability, and robust risk management strategies.

What are business mentoring programmes?

Business mentoring programmes pair experienced business professionals (mentors) with less experienced entrepreneurs or businesspeople (mentees) for the purpose of advice, guidance, and skills development. These programmes often involve one-on-one mentoring relationships where mentors help mentees to develop their business ideas, improve their entrepreneurial skills, and navigate the challenges of starting and running a business. Business mentors help mentees build skills by providing insight and feedback on their practices. They work on setting goals for growth and may connect mentees with their network and business opportunities.

Business mentoring programmes are often offered as part of a larger package, such as a combination of training, mentorship, and access to finance. They target various sectors, including agriculture, micro, small and medium-sized enterprises (MSMEs), and cooperatives.

How are business mentoring programmes expected to work?

Business mentoring programmes work by helping young entrepreneurs gain the knowledge and skills they need to succeed in business. Mentoring focuses on teaching practical skills such as business management, marketing, finance, and operations. By improving these skills, young people are better equipped to start and run their own businesses. This generates self-employment for themselves and possibly others.

For example, in the agricultural sector, these programmes help small-scale farmers by improving their business skills and providing better access to financial resources. This is particularly important in areas where market saturation limits the growth of agribusinesses (Taqeem Initiative, 2017; Wambalaba et al., 2021). Mentoring may also empower women by encouraging them to enter traditionally male-dominated fields (Cherukupalli et al., 2019).

Mentors also connect mentees with networks, including industry professionals, investors, and potential clients. These connections can lead to job and business opportunities, partnerships, and business growth (Ogada et al., 2012; Engelhardt et al., 2011).

In the service sector, mentoring efforts focus on improving business practices for MSMEs (Brooks et al., 2018; Anderson and McKenzie, 2022). Mentoring should improve business practices and increase assets and income for unemployed and underemployed youth.

What are examples of business mentoring programmes in sub-Saharan Africa including design features?

Business mentoring programmes have been implemented across diverse contexts, including post-conflict settings, humanitarian crises, and economic downturns. For example, during the COVID-19 pandemic, mentoring programmes like the *Youth Employment and Empowerment Programme* (YEEP) in Sierra Leone adapted by shifting to virtual platforms to ensure continued support for young individuals (Simmons et al., 2015). In nations grappling with economic crises, mentoring initiatives such as USAID's *Potential of Youth Activity* have assisted youth navigate challenging job markets (Statman and Abera, 2020).

Mentors range from experienced community volunteers to global business experts. Mentees include young entrepreneurs and economically disadvantaged individuals.

Design choices for business mentoring programmes

The design choices for mentoring programmes include the following issues:

- What minimum experience should be required to be a mentor? Mentors were recruited from a variety of backgrounds. Most usually these were business people. For example, five years of business experience was required for mentors in a programme in Nairobi (Brooks et al., 2018) and in Kenya 18 mentors had to have at least two years of experience in running an agribusiness (Wambalaba et al., 2021). In contrast, *Huguka Dukore Akazi Kanoze (HDAK)* in Rwanda used field officers as mentors.
- What training and orientation should be provided to mentors? For instance, business consultants were given 5–10 days of training on providing value-added to businesses to work on the *Growth and Employment (GEM)* project in Nigeria (Anderson and McKenzie, 2022).
- Individual or group mentoring? In northern Uganda, mentoring was offered to groups of women in SHGs, for example (Munavu, 2019). *YouthConnekt model in Africa* paired mentors with entrepreneurs in a 1:2 ratio, with the mentors providing personalized guidance and support (Awan, 2021).

- Structured or unstructured mentoring? Under *Cultivate Africa's Future Phase I* (Culti AFI) in Kenya 18 local county-based mentors worked with local youth officers to deliver eight course modules to the entrepreneurs, and the *YouthConnekt* programme provided structured mentoring with a 12-week training programme (Awan, 2011). In *Youth Entrepreneurship Facility (YEF)* Belal (2015) business mentors were first trained under a structured business mentorship programme and similarly in YEP sought to introduce ILO's Know About Business training programme to train and mentor young people (Morojele, 2008). In an unstructured mentorship programme in Nairobi, mentors were experienced business owners over 40 years old with at least five years' experience. Mentors and mentees discussed issues facing the business, which usually changed from meeting to meeting and differed between businesses (Brooks et al., 2018).
- What to cover in the mentoring? A mentoring programme in Nigeria included management, finance and accounting, marketing and sales, operations, and HR (Anderson and McKenzie, 2022). As just mentioned, a programme in Nairobi determined content based on the recent issues facing the business (Brooks et al., 2018).
- How to match? Mentors need to be appropriately matched to mentees. This will most commonly be the level of working in the same sector, from the same community or being of the same sex.
- How to monitor and supervise mentors? In Nigeria, mentors were assigned faculty supervisors to ensure the quality of the mentorship process (Anderson and McKenzie, 2022).
- What should be the ratio of mentors per mentee? In Rwanda each local field officer was expected to provide mentoring to 350 youth (Monschein, 2019), whereas in *YouthConnekt model in Africa* each mentor had just two mentees (Awan, 2021).
- Virtual or in-person mentoring? This varies across studies with a few opting for virtual mentorship or leveraging online tools such as TEFConnect platform (Awan, 2021; Wambalaba et al., 2021)
- What duration, intensity and termination? How long should mentoring last, and how frequent? How is termination managed? Under the *Growth and Employment*

(GEM) project in Nigeria, mentoring was provided for 11 eight-hour days spaced over 6–9 months, with meetings at least once per month (Anderson and McKenzie, 2022). In the microenterprise training programme, mentorship lasted 17 months (Brooks et al., 2018). In SPARK's Cooperative Support Programme (CSP) mentees were required to meet with the mentor each week at the mentor's business, which was designed to minimize the cost to the mentors and no limits were placed on the number of meetings being held (Taqueem initiative, 2018). In *Huguka Dukore Akazi Kanoze (HDAK)* interviewed graduates mentioned having received a 10 to 15-minute follow-up call as a part of the youth accompaniment program, only once in six months after finishing the training (Monschein, 2019).

- Mentoring and what else? Business mentoring is most usually provided alongside other services. For example, the *ADB Rural* Microenterprise Programme "provide[d] youth with capital, skills training, and mentorship to launch agriculture-based micro enterprises" (Kumbi and Mwaka, 2003: p, 68).

Further details of the individual projects which are part of this meta-analysis, are given in Table 1.

Table 1: Examples of business mentoring programmes

The UNDP *Regional Programme for Supporting the Upscaling of the YouthConnekt model in Africa* was a comprehensive initiative that drew on the expertise of global business mentors to support participating entrepreneurs. These mentors, sourced from various parts of the world, were paired with entrepreneurs in a 1:2 ratio, providing personalized guidance and support throughout a 12-week training programme. The programmes operated from 2018 to 2021 (Awan, 2021).
Two distinct interventions were employed to support young and inexperienced microenterprise owners in Nairobi, Kenya. The first intervention consisted of formal business training delivered by faculty from Strathmore University and the second intervention paired mentees with successful businesswomen mentors from the same community and industry, providing one-to-one guidance. The study randomly assigned participants into three groups: one receiving mentorship, another one attending business classes, and a control group receiving no intervention. Mentors were experienced business owners over 40 years old with at least five years in their respective businesses, while mentees were under 40 and had been operating their businesses for less than five years. After controlling for sector-specific differences and profitability, 366 individuals were selected, and mentors were carefully matched with mentees in the same business sector to ensure relevant and effective mentorship. The programme operated for a period of 17 months (Brooks et al., 2018).
The *Youth in Africa Strategy 2016–2025 (JfYA Strategy)* included activities to bolster young entrepreneurship. These included training and mentoring 400 young from Ghana, Nigeria, Mali, Togo,

and Zimbabwe under the *Africa Guarantee Fund*, and the *Rural Microenterprise Programme* which would provide youth mentorship to launch agriculture-based micro enterprises (Kumbi and Mwaka, 2023).
A programme in northern Uganda in four pilot districts selected and trained 32 community business agents to offer business mentoring to self-help groups (SHGs). These mentors provided essential business management support to 11,875 economically disadvantaged individuals, with women making up 75% of the beneficiaries and youth accounting for 33%. The programme's reach extended across 16 clusters and 128 villages (Munavu, 2019).
The *Huguka Dukore Akazi Kanoze (HDAK)* in Rwanda included a business mentoring programme in supporting youth employment and entrepreneurship. Each implementing partner (IP) had local field officers dedicated to providing mentoring support to 350 youth. HDAK also relied on youth leaders nominated by the training class to serve as peer points of contact for support and mentoring during and after training, aiming to enhance mentoring and coaching while maintaining a more manageable staff-to-beneficiary ratio. Mentoring was delivered through a combination of one-on-one sessions, group workshops, and online platforms. The programmes operated from 2016 to 2021 (Monschein, 2019).
The UNIDO project *Enhancing Youth Employability and Entrepreneurship* in Tanzania set up of a network of business mentors who supported the programme by assisting in the placement of interns in MSMEs. The mentors came from a variety of backgrounds - private consultants, and Business Development Supplier officers from existing Private Sector Organisations. The mentors delivered off-line training at the EDC for 15-30 days to groups of 15-20 youths (UNIDO 2016).
The *SPARK's Cooperative Support Programme (CSP)* was an agricultural cooperative support programme in Rwanda to enhance the management operations of cooperatives (in which the majority of employees are aged below 35). It provided mentoring services to improve the business acumen of cooperative managers. The programme was implemented by SPARK, a Dutch Non-Governmental Organization (NGO), in two consecutive cohorts of 100 cooperatives. The first cohort of 40 cooperatives received training from June to November 2014, while the second cohort of 60 cooperatives was trained from January to August 2015 (Taqeem Initiative, 2017).
Under the project *Cultivate Africa's Future Phase I* (Culti AFI) in Kenya 18 local county-based mentors with more than two years of experience in running an agribusiness were trained to assist entrepreneurs, with a particular emphasis on engaging and retaining female entrepreneurs. These mentors collaborated with local youth officers to deliver eight course modules to the entrepreneurs. A total of 346 mentees, both male and female, were selected for a structured mentorship programme, including 49 who had not received training. These mentees were paired with 18 mentors, consisting of six females and 12 males. Both mentors and mentees were equipped with respective manuals and assigned faculty supervisors to ensure the quality of the mentorship process. Due to the COVID-19 pandemic, in-person mentorship sessions were transitioned to virtual platforms (Wambalaba et al., 2021).

What has been the implementation experience of business mentoring programmes?

This section presents evidence on the implementation of business mentoring programmes. The evidence on implementation most usually comes from process evaluations, though some impact evaluations may also provide relevant data. There are 27 process evaluations. But many of these simply mention that there was business mentoring, providing little or no evaluative evidence.

Implementation issues in youth business mentoring programmes include the scarcity of qualified mentors, challenges in measuring programme effect, difficulties securing stakeholder support, inefficiencies in mentor-mentee matching processes, and the need for further understanding to achieve gender parity in mentoring outcomes. These points are elaborated here:

- A critical issue is the **need for more experienced and qualified mentors** willing to invest their time. Staff from various IPs have reported significant difficulties in meeting the ongoing support needs of youth. In some instances, a single field officer is providing post-training coaching and mentoring to as many as 350 youth. Graduates have described receiving only a cursory follow-up call every six months, which highlights the need for more support to be offered. Field officers have cited the accompaniment programme as the most challenging part of their job, given the number of graduates expected to assist (Monschein, 2019).

- Another challenge is **measuring the effect of mentoring programmes**. Establishing clear metrics and tools to evaluate the effectiveness of these initiatives can be complex. While the results framework may align with operational objectives, complete with baselines and targets, some indicators can be challenging to measure. Simpler indicators could be more beneficial. For instance, in a programme designed to promote savings among group members, a direct indicator of savings would have

been valuable, although a proxy indicator for reinvestment of savings was used (Munavu, 2019).

- The **policy and regulatory environment also present challenges**, particularly in securing stakeholder buy-in. Programmes like the *Youth Entrepreneurship Facility* (YEF), which offers comprehensive support for youth entrepreneurship, have struggled to gain support from local governments, educational institutions, and other stakeholders. This lack of buy-in has impeded the creation of useful connections to help emerging entrepreneurs (Belal et al., 2015).

- Moreover, the process of matching mentors with mentees based on interests, skills, and goals has proved difficult (UNDP, 2022).

- A large list of vague and **overambitious targets and indicators** (such as 10 million jobs by 2025, 25 million opportunities through mentoring, etc.) impeded on some of the considerable progress made by the project, particularly in the area of youth participation and entrepreneurship (Awan, 2021).

The effects of business mentoring programmes

Overview

Business mentoring has a significant positive effect on skills development and employment, as well as a slightly smaller effect on earnings. **There are also effects on material well-being, but the effect is statistically insignificant, which may be because of the small number of included studies (just four impact evaluations). Mentoring appears to have a detrimental effect on business outcomes, with a moderate negative effect.** These results are derived from a meta-analysis, which calculates the average effect across all studies, providing a comprehensive overview of the effect of business mentoring on various outcomes.

The average effect from meta-analysis is commonly reported as a standardised mean difference (d), which is the difference in the mean in outcomes between treatment and control, divided by the standard deviation of the outcome. Rather than d, we report (Hedge's) g, which includes a small adjustment to d to account for bias in small samples. A g of less than 0.1 is considered a small effect, 0,1-0.2 is moderate and above 0.2 is a large effect.

The meta-analysis, detailed in Annex 1, reveals that business mentoring has a statistically significant, positive effect albeit small, effect on employment (g=0.04), skills development (g=0.02), and overall skill acquisition (g=0.12) (Table A.1 in Annex 1). The effect on wages and earnings is also significant, but still small (g=0.09). Positive effects on material well-being (g=0.14) are also observed, but these do not reach statistical significance due to the limited number of studies available. Mentoring a statistically significant small positive effect on business (g=0.05). However, there is a medium level of confidence in these findings due to concerns about the quality of the included studies and the small number of studies examining business and material well-being outcomes.

The effect size can be translated into an absolute and relative change in employment (see Annex 2 for details of the calculation). The average effect size for the effect of business mentoring on skills, represented by the standardised mean difference (SMD) of g=0.03, translates into a 1.8 percentage point absolute increase in employment compared to the control group. This means that, on average, youth who received business mentoring were 3.6% more likely to gain employment than those in the control group who did not receive mentoring.

The statistic is also converted into the Number Needed to Treat (NNT), which is a measure of the effectiveness of a treatment. In this context, the NNT is 55, meaning that for every 55 youth who receive business mentoring, one additional youth will gain employment who would not have done so otherwise without the mentoring. This interpretation suggests that while business mentoring has a positive effect on skills and employment, the effect is relatively small, as it requires a relatively large number of youth to be mentored to achieve a single additional young person in employment or self-employment.

Findings by study

Four impact evaluations (all RCTs) were included in this technical report.

Table 2: Studies of business mentoring programmes in sub-Saharan Africa

Study	Intervention	Findings
Growth and Employment (GEM) project in Nigeria providing business mentoring to small enterprise owners with a performance rating between 5 and 8 during the 2016 induction workshops in Abuja and Lagos.		
Anderson and McKenzie (2022)	A total of 753 firms, each with 2 to 15 employees, were randomly assigned to four intervention groups and a control group. The first group received traditional entrepreneurial training consisting of 25 hours online and 12 days in-class business training. The second group was offered a more customized intervention with government-subsidized business	The findings indicate that mentoring and consulting led to a 10-15% improvement in skills such as tracking financial flows, preparing income statements, and balance sheets. But there was a negative effect on the time spent on financing and accounting functions and overall business practices in the first year. This could be due to various factors,

Study	Intervention	Findings
	consultants or mentors providing 88 hours of tailored consulting or mentoring services. The third group was assisted in hiring an accounting or marketing specialist (insourcing), and the fourth group was connected to external specialists for accounting and marketing services (outsourcing).	such as the training content not being well-aligned with the businesses' needs, ineffective delivery of the training, or the businesses' inability to implement the learned skills effectively. There was a 10% improvement in marketing and sales in the second year however, these improvements were not statistically significant.
Researcher led *microenterprise mentorin*g for female microenterprise proprietors under the age of 40 and in business for less than 5 years in Kenya		
Brooks et al. (2018)	372 participants were randomly allocated to three distinct cohorts: the first received individualised mentorship from prosperous business owners within the same community and industry; the second partook in structured business courses delivered by local university educators, encompassing subjects such as accounting, marketing, and business strategy; and the third cohort served as a control group, receiving no intervention. The mentorship sessions consisted of four two-hour classes and were conducted at the mentors' business premises, whereas the business classes were convened at local community halls.	On average, the mentorship cohort experienced a 20 % increase in profits, underscoring the efficacy of personalised mentorship and the support derived from seasoned business practitioners within the community. The effect is attributed to the mentor identifying better suppliers. This effect exhibited a declining trend over time, corresponding with the dissolution of mentor-mentee relationships. Employment did not change and had no significant effect. In contrast, formal business education did not significantly influence the participants' business performance. (Brooks et al., 2018).
SPARK's Cooperative Support Programme (CSP) providing business mentorship to cooperatives in agriculture sector in Rwanda		
Taqeem Initiative (2017)	100 cooperatives were chosen to receive SPARK's intervention, which was developed to be implemented in two consecutive cohorts: 40 **cohort 1** cooperatives and 60 **cohort 2** cooperatives (between June-November 2014).	The findings indicate that the SPARK CSP had a positive effect on the skills of the cooperatives involved, encouraging them to expand their management structures and seek out new business opportunities, which could lead to improved performance and increased competitiveness in the agricultural sector, as well as increased employment. Entrepreneurial training led to improved business practices, with 25.7% of youth registering their businesses, 28% acquiring income tax Personal

Study	Intervention	Findings
		Identification Numbers (PIN) compared to 12% in the control group, 9% registering their business name (6% control), and 9% obtaining County Government licenses (5% control). There was a negative effect on the daily earnings predictions for the respondents at the endline, as they appeared to be more uncertain about their daily earnings compared to their counterparts at the baseline. A significant drop in monthly sales was observed in the treatment group, with a 47% decrease between the baseline and end-line, while the control group experienced only a 9% decrease in sales over the same period. Although these changes were not statistically significant at the 0.05 level for both the treatment and control groups, they nonetheless indicate a concerning trend.
Cultivate Africa's Future Phase I (CultiAF1) provides business mentoring and training in Kenya		
Wambalaba et al. (2021)	346 mentees and 18 local county members with more than 2-years of experience of running agribusiness were selected. Virtual mentorship was providing due to COVID-19.	Mentorship led to significant positive effect on business valuation (68.7% of those mentored compared to 50% in the control group). However, mentorship alone negatively effected business performance with a significant 62% reduction in business outcomes in treatment group compared to the control group with 6% reduction in business performance. The treatment group also earned less sales than the control group, suggesting that the mentorship intervention did not have the expected positive effect on those who received it.

Evidence supporting the causal chain

Business mentoring has been identified as a critical strategy for improving youth employment in sub-Saharan Africa, as evidenced by multiple evaluations and studies. Awan (2021) noted that while a project has made significant strides in promoting youth social and economic participation and entrepreneurship, it has faced challenges in achieving specific employment targets. However, Belal et al. (2015) observed that approximately 65% of entrepreneurs developed business plans after receiving training, suggesting that mentoring plays a crucial role in fostering essential skills and networking among youth, thereby sustaining their motivation. Moschen (2019) further reported that a substantial number of youth experienced new or improved employment opportunities following participation in the HDAK project, leading to increased incomes. Key factors contributing to this success included robust government support and the establishment of savings and lending communities, which offered alternatives to formal lending and expanded self-employment opportunities. Despite these successes, challenges such as insufficient follow-up resources and inconsistent data on employment outcomes necessitate adaptive management to enhance the effectiveness of business mentoring initiatives (Awan, 2021; Belal et al., 2015; Moschen, 2019).

Moreover, mentoring has been shown to significantly influence the mindset of young people. It has been associated with increased motivation and self-confidence, more realistic job expectations, altered priorities, reduced fear of interviews and work, enhanced perseverance, greater clarity, and a more optimistic outlook on the future (Cherukupalli, 2019). The combination of training and mentoring in soft/life skills, business skills, and practices, along with seed funding and the facilitation of business networks, has enabled young people to initiate or strengthen their businesses. For instance, women's empowerment has been particularly impactful, with several studies documenting women starting businesses in traditionally male-dominated sectors, thereby benefiting their families and contributing to broader societal changes (Cherukupalli, 2019).

Cost analysis

The cost-effectiveness of business mentoring programmes was not discussed in any of the studies.

Implications of study findings

Business mentoring has a significant positive effect on skills development and employment, as well as a slightly smaller effect on earnings. There are also effects on material well-being, but the effect is statistically insignificant, which may be because of the small number of included studies (just four impact evaluations). Mentoring appears to have a detrimental effect on business outcomes, with a moderate negative effect.

Implications for policy and practice

1. Tailored mentoring programmes**:** Policymakers and practitioners should develop mentoring programmes tailored to the specific needs of female entrepreneurs, focusing on areas such as financing, technical skills, and business knowledge.
2. Monitoring and evaluation**:** Implementing robust monitoring and evaluation frameworks is crucial to track the long-term effect of mentoring programmes and make necessary adjustments to improve their effectiveness.
3. Diverse mentoring formats**:** Practitioners should explore and implement various mentoring formats, including virtual mentoring, to accommodate different preferences and contexts.
4. Building resilient programmes**:** Policies should focus on building resilient mentoring programmes that can withstand political and economic challenges. This includes establishing strong governance structures, ensuring fiduciary accountability, and implementing robust risk management strategies.

Implications for research

1. Emphasizing the need for impact evaluations in business mentoring programmes: There is a significant evidence gap in impact evaluation on business mentoring programmes. Strengthening the evidence base with more impact evaluations is crucial. These studies should particularly focus on employment quantity and quality as their outcomes.

2. Urging for cost-effectiveness data in mentoring interventions: The review has identified gaps in studies that specifically mention cost data. It is essential to build the cost-effectiveness of mentoring interventions to ensure the most efficient strategies are identified and the overall effectiveness of the programmes is improved.
3. Need for sex-disaggregated data: Future research should continue to disaggregate data by sex to better understand the unique challenges and benefits of mentoring for each gender.
4. Longitudinal studies: Longitudinal studies are needed to understand the long-term effect of mentoring on business outcomes and to identify strategies for sustaining the benefits.
5. Negative effects on business outcomes: The surprising negative effect on business outcomes warrants immediate investigation to identify the causes and potential mitigation strategies. This calls for innovative problem-solving in the field of business mentoring.
6. Political and economic challenges: Research should explore how mentoring programmes can be designed to be more resilient to political and economic challenges, such as conflict and inaccessibility. This includes studying the role of governance structures and fiduciary controls in ensuring programme effectiveness.

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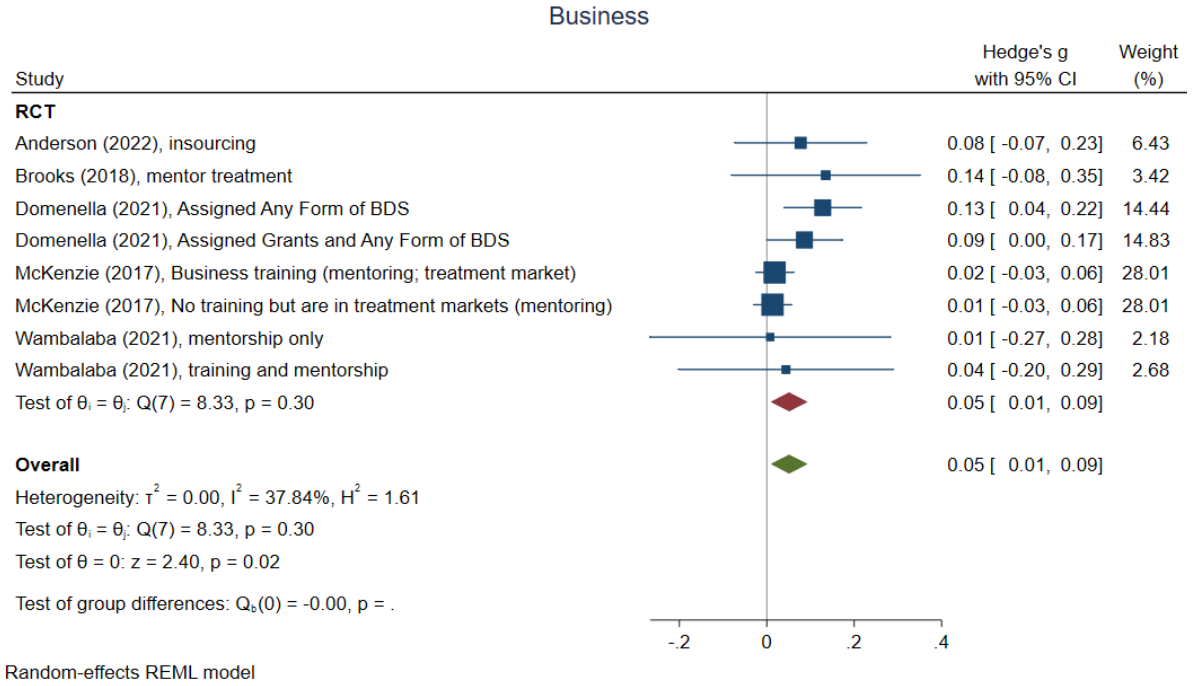
Annex 1 Results of meta-analysis

This annex presents the forest plots from the included studies for this report. Each horizontal line in a forest plot shows the 95% confidence interval for Hedges' g for a specific study, with the meta-analysed effect size represented by the diamond at the bottom of the figure. If the horizontal line crosses the vertical line then that study finds no significant effect.

The I^2 and Q statistic are measures of heterogeneity, that is the extent of variation in effect sizes between studies. Where there is substantial variation (as in Figure A1.1), then it is useful to conduct further analysis to understand the sources in that variation, which is presented in the sub group analysis.

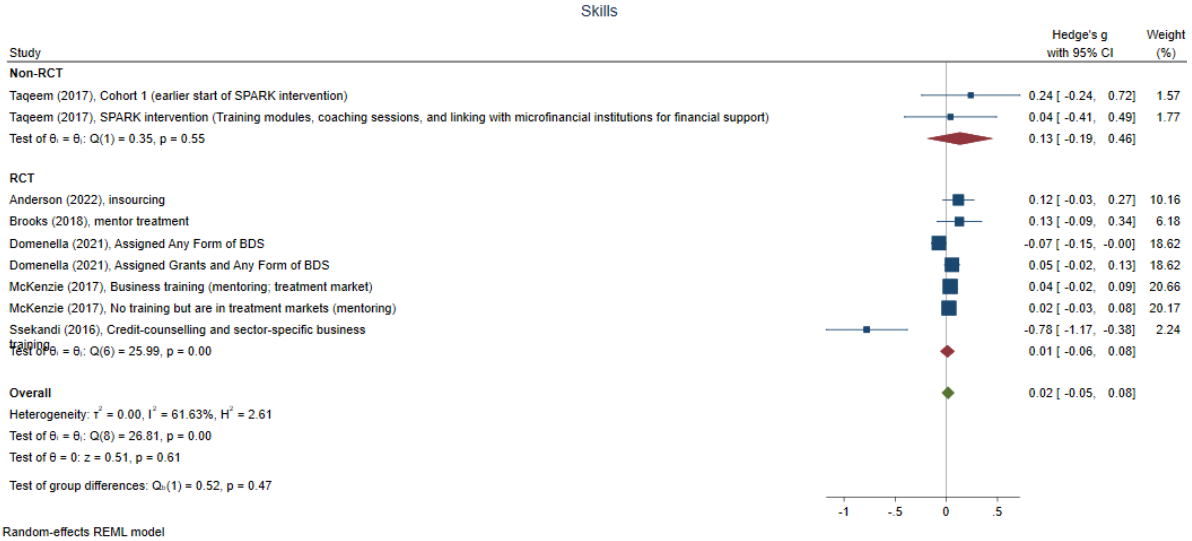
The meta-analysis, detailed in Annex 1, reveals that business mentoring has a statistically significant, positive effect albeit small, effect on employment (g=0.04), skills development (g=0.02), and business (g=0.05) (Table A.1 in Annex 1). The effect on wages and earnings is also significant, but still small (g=0.09). Positive effects on material well-being (g=0.14) are also observed, but these do not reach statistical significance due to the limited number of studies available. Contrary to expectations, mentoring seems to have a negative effect on business outcomes, with a statistically significant moderate negative effect (g=-0.18). The study-level summaries in the main text describe the negative effects on business for two of the studies. However, there is a medium level of confidence in these findings due to concerns about the quality of the included studies and the small number of studies examining business and material well-being outcomes.

Figure A1.1: Effects of business mentoring programmes on business



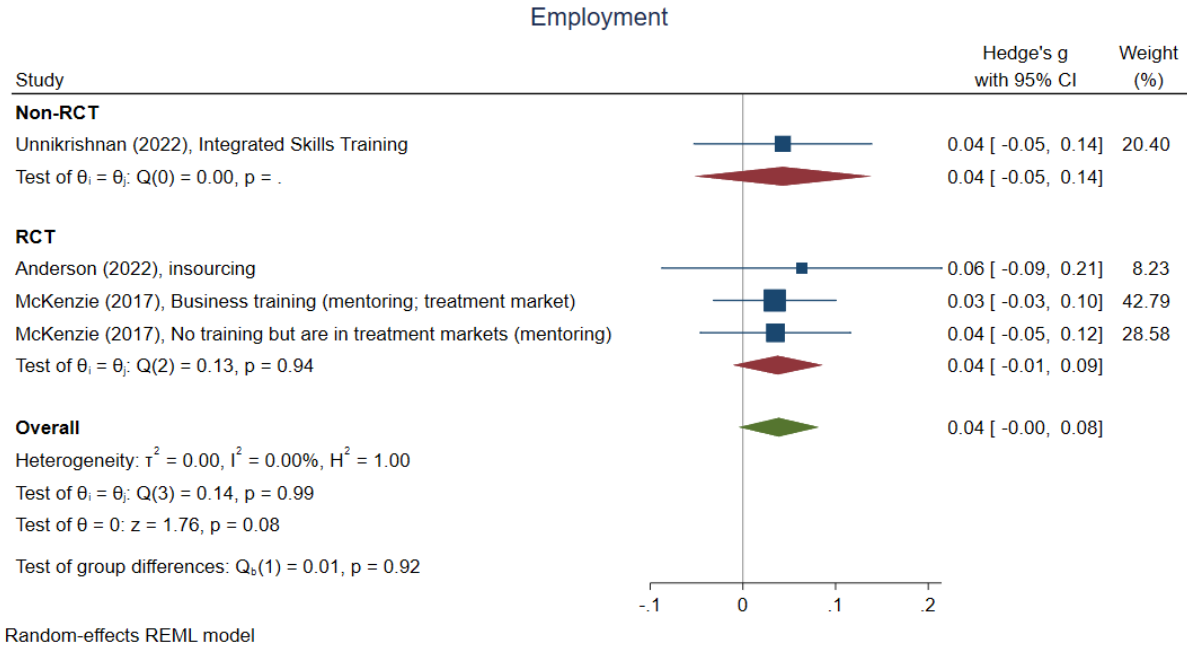
Source: Authors' calculations. N*otes*: CI = confidence interval; RCT = randomized controlled trial; p = prob value. I^2, H^2, τ^2, and Q are all measures of heterogeneity. Test of Θ=0 is a test that none of the effect sizes are significantly different from 0, and z the significance test for that statistic. See explanation of figure in the text.

Figure A1.2: Effects of business mentoring programmes on skills



Source: Authors' calculations. N*otes*: CI = confidence interval; RCT = randomized controlled trial; p = prob value. I^2, H^2, τ^2, and Q are all measures of heterogeneity. Test of Θ=0 is a test that none of the effect sizes are significantly different from 0, and z the significance test for that statistic. See explanation of figure in the text.

Figure A1.3: Effects of business mentoring programmes on employment



Source: Authors' calculations. N*otes*: CI = confidence interval; RCT = randomized controlled trial; p = prob value. I^2, H^2, τ^2, and Q are all measures of heterogeneity. Test of Θ=0 is a test that none of the effect sizes are significantly different from 0, and z the significance test for that statistic. See explanation of figure in the text.

Annex 2 Calculation of meaningful effect sizes

The SMD can be converted to an odds ratio (OR) using the formula $lnOR = \frac{g\,\pi}{\sqrt{3}}$ (Borenstein et al., 2009). Using the OR a 2x2 table can be created, for which we need an assumption of the share of the control group gaining skills. We assume 50%, which is a commonly observed value in the dataset. We also need to assume the sample size for treatment and control, though the result is not sensitive to that assumption. We assume 100 in each group. With g=0.04, OR=1.08 this gives the 2x2 table:

Table A2.1: 2x2 table to calculate the percentage change in employment

	Employed	Unemployed	Total
Treatment	52	48	100
Control	50	50	100
Absolute % change		1.8%	
% change (cf comparison rate)		3.6%	
No. needed to treat		55	

The absolute difference in employment between treatment and control is 1.8%, or a relative difference of 3.6%.

The number needed to treat is calculated as the number treated divided by the absolute difference in employment between treatment and control groups. This shows that 55 people need to be exposed to the intervention to generate one additional job.

Annex 3 Critical appraisal

Critical appraisal assesses the confidence we can have in study findings, being classified as high, medium or low. The results of the critical appraisal inform the overall confidence we have in the findings reported in the technical report.

Table A3.1: Critical appraisal of included studies

Studies	Study design	Confidence
Anderson, 2022	Impact	Medium
Brooks, 2018	Impact	Medium
Taqeem Initiative, 2017	Impact	Low
Wambalaba,2021	Impact	Low
Awan, 2021	Process	Medium
Belal, 2015	Process	Low
Cherukupalli, 2019	Process	Medium
Encore Employment, Training & Consultancy Services Plc, 2013	Process	Low
Engelhardt, 2011	Process	High
Gray 2017	Process	Medium
Henry, 2009	Process	High
Kumb, 2023	Process	Medium
Lyby, 2010	Process	Medium
Management Systems International, 2017	Process	Medium
Mileiva, 2019	Process	Medium
Miller, 2011	Process	Low
Minaye, 2022	Process	Low
Monschein, 2019	Process	High
Montrose, 2016	Process	Medium
Morojele, 2009	Process	High
Munavu, 2019	Process	High
Ogada, 2012	Process	Medium
Pearson, 2013	Process	High
Pizzo, 2015	Process	High
Schneider, 2012	Process	High
Simmons, 2015	Process	High
Statman, 2020	Process	Medium
Stolyarenko, 2017	Process	High
Terminal Evaluation Consultants, 2006	Process	High
UNDP, 2022	Process	Medium

UNIDO, 2015	Process	Medium

Table A3.2: Threshold values for critical appraisal

		No. of included studies for effect estimate		
		5 or less	6-9	10 or more
Assessment of studies	Mainly Low	Low	Low	Low
	Medium	Low	Medium	Medium
	Mainly High	Low	Medium	High

Mainly low = At least 60% of studies are rated low

Mainly high = At least 60% of studies are rated high

Medium = any estimate not covered by the above two categories

Adjustment for heterogeneity: reduce by one level if $I^2 > 80\%$

Application to this report

The confidence in quantitative findings (impact evaluations) is “low” on account of the small number of studies (only four impact evaluations included).

The confidence in qualitative findings (process evaluations) is rated “medium”.