# SIYAKHA YOUTH ASSETS STUDY

DEVELOPING YOUTH ASSETS FOR EMPLOYABILITY

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A study as large and complex as this one is only possible through the involvement of a range of role players, each of whom have shown significant commitment to the project since its conception in late 2012.

Prof Leila Patel initially promoted the idea for the project at a Roundtable Discussion on solutions to the challenge of youth unemployment held in October 2012. Her idea then was to understand the role that was already being played by the many youth employability programmes seeking to address the challenge. This initial idea was later developed into the full study. Leila played the role of Principal Investigator alongside Prof Gina Chowa. Together they conceptualised the study and the theory of change that has been used to inform the study design, intervention implementation, analysis and dissemination. Leila was responsible for the overall knowledge production and intellectual oversight of the project and the overall leadership on the project. Her insights in 2012 and conceptualisation in 2013, have been revealed to be on the cutting edge of thinking about Active Labour Market Programmes internationally, as evidenced by the alignment of the theory of change and findings of the study to a number of evidence synthesis articles that have recently been published.

Prof Gina Chowa, was also a Principal Investigator in the study. She took responsibility, in particular, for the conceptualisation of the role of a financial capability intervention, drawing on her significant expertise and research profile in this area of innovation. She also co-conceptualised the experimental design of the study and played an important role in the development of the sampling strategy and the instrument development, piloting and testing as well as ongoing technical advice. She was also centrally involved in the assessment and selection of implementing partners. Both Prof Patel and Prof Chowa led the development of several successful funding proposals to support the project.

The conceptualisation of the project occurred in part during a workshop at which Prof Michael Sherraden, Prof Margaret Sherraden, Prof Benjamin Lough, and Prof Lauren Graham gave inputs. Lauren was subsequently responsible for the implementation and project management of the study. She took overall responsibility for the execution of the study design, the instrument development, the financial capability curriculum development (in partnership with Grounded Media), the recruitment and management of implementing partners, oversight of the training of implementing partner trainers for the financial capability intervention, management of the research and fieldwork teams, ethical approval, data collection and data management. She also took the lead on the conceptualisation of the qualitative component of the study and was responsible for the co-development of the analysis plan at each phase of the study. She took overall responsibility for the report writing at each phase of the study and was responsible for the financial oversight on the project.





Zoheb Khan played a significant role in the execution of the study. He was involved in the development of the research instruments, and the data collection. He played a particular role in data cleaning and analysis at all phases of the project and was responsible for executing the analysis plans, and assessing the robustness of the results, as well as writing up the methodology and findings of the study at all phases of the project. He has also played a key role in liaising with implementing partners throughout the project.

Prof Rainier Masa was centrally involved in developing the sampling strategy for the project and the development of research instruments. He wrote the initial literature review for the project and was responsible for the analysis of data for the baseline report. He has provided ongoing technical advice and guidance.

Leilanie Williams coordinated the project logistics, fieldwork and partner management for three years. She was responsible during this time for partner liaison, ensuring the ongoing data collection of the last two waves of data, data management, and some statistical analysis and report writing for the first phases of the study. She was also involved in the collection and analysis of the qualitative data. Leilanie took responsibility for quality assurance of the data.

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## ACRONYMS

ALMP	Active Labour Market Programme			
ATS	Afrika Tikkun Training Services			
CSDA Centre for Social Development in Africa				
FFLFFW	Fit for Life Fit for Work			
ILO	International Labour Organisation			
J-PAL	The Abdul Latif Jameel Poverty Action Lab			
NIDS	National Income Dynamics Study			
NYDA	National Youth Development Agency			
OLS	Ordinary Least Squares			
PC	Principal Component			
PCA	Principal Components Analysis			
QLFS	Quarterly Labour Force Survey			
RAA	Raymond Ackerman Academy			
SBSA	Standard Bank South Africa			
SES	Socio-economic status			
SSA	Sub-Saharan Africa			
TSI	Thabiso Skills Institute			
YEP	Youth Employability Programme			

## EXECUTIVE SUMMARY

The latest unemployment statistics show a continued rise in the levels of youth unemployment with the expanded unemployment rate creeping up to 52% for youth aged 15 to 34 years (Statistics South Africa, 2019). The most significant contributor to this situation is the limited growth in the number of jobs that can match the number of new work seekers entering the labour market each year. However, barriers to the labour market and struggles in navigating the pathways to work also contribute to the challenge.

## Addressing the challenge of youth unemployment in South Africa

The myriad of factors that contribute to this situation are well-documented elsewhere (see for instance De Lannoy, Graham, Patel & Leibbrandt, 2018). Suffice to say that the situation of rising unemployment does not stem from a lack of effort on the part of the state, civil society, and the private sector. The state in particular has invested significantly in programmes and interventions to drive employment generally and youth employment specifically. Examples include the Expanded Public Works and Community Works Programmes, investments in Special Economic Zones, and the Employment Tax Incentive, all of which are major Active Labour Market Programmes (ALMPs) intended to drive growth in employment and promote labour-absorption. And while the private sector has not seen significant expansion in jobs overall, many have been participating in the Youth Employment Service programme and investing in skills training programmes to support youth in their efforts to transition to work. Civil society organisations are the largest contributors to the delivery of training programmes offered outside of the formal post-secondary education and training system (Graham et al., 2018). There are thus significant efforts, across sectors of society, being made into supporting youth to transition to work.



Much is being learned from such interventions, but there remain gaps in the evidence base both in South Africa and internationally. A recent systematic review of ALMPs internationally notes the paucity of good quality evidence, particularly in the Sub Saharan Africa (SSA) region, that can inform the development of impactful ALMPs (Kluve et al., 2019). This study was conducted to address such a gap. It is particularly relevant in the South African context where youth unemployment figures continue to creep upwards and where just over a third of young people are neither in education, employment or training. It is also timely in the international context given the increased interest in evidence about the effects of ALMPs in various contexts.

### What this study contributes

We make two novel contributions in this study, each of which can inform future programming. First, we present evidence about the effects of youth employability programmes (YEPs) – programmes that offer a combination of technical and human capability skills training to young people who struggle to access formal post-secondary education and the labour market. In doing so we learn from what is already happening on the ground and present evidence about what works in programme delivery to offer young people the best chances of success. Second, we assess the impact of a financial capability intervention focused on promoting savings behaviour amongst young people. Financial capability interventions are not typically viewed as an ALMP intervention, but in other contexts they have been found to deliver positive education outcomes. The intervention was a training course on financial literacy together with the opportunity to open a saving account. We thus sought to understand whether it could be a complementary ALMP option in the South African context.

The Siyakha Youth Assets study therefore addresses three questions:

- 1. What role do youth employability programmes play in young people's labour market outcomes?
- 2. What programme features of youth employability programmes work best and for which groups of young people?
- 3. What impact does a financial capability intervention have on young people's labour market outcomes?

## Study design

To address these questions the study had two components. The first is a non-randomised component, aimed at understanding the relative effects of different programme features on labour market outcomes. Here, there were no possibilities to randomise which participants were allocated to which programme, since participants present themselves to a youth employability programme (YEP) of their choosing and, if they meet particular entry requirements, are selected. Their participation in YEPs and in which kind of YEP is therefore not random. Further, their allocation to the YEP training site is also not random. The fact that we included eight different YEPs, each with different combinations of programme features, and comprehensively controlled for confounding factors that may also influence employment outcomes allowed us to assess the relative effects of the programme features for the YEP participants. The first component also included a comparison of employment rates between the Siyakha sample and a sample of youth in a different dataset – the Quarterly Labour Force Survey (QLFS) – matched on demographic characteristics to arrive at an estimate of the effects of YEP participation.

The second component is an experimental, randomised component to assess the impacts of financial capability on our outcomes of interest. In this component half of the 44 YEP training sites were randomly assigned to receive a financial capability intervention consisting of a short savings training module and access to a no-cost bank account.

For both components, a pre- and post-test design was employed. We administered a survey to 1974 young people between the ages of 18 and 35 as they entered a YEP offered by one of the eight implementing partner organisations. This baseline (wave 1) survey covered a range of indicators including demographics, financial literacy and behaviour, employability, employment and job search experience, education and household characteristics. Data collection for wave 1 took place between January 2015 and April 2016 (this time period allowed for different start dates of the programmes). We then assessed the participants again as they exited the YEPs (wave 2), between July 2015 and August 2016 (with the overlap in time periods due to the differing length of the programmes), and on two further occasions after programme completion: on average one-year post-completion (from January to May 2017 for wave 3) and two years post-completion (November 2017 to April 2018 for wave 4). The longer-term post-training follow ups allowed us to assess longer-term outcomes and whether any short-term outcomes were sustained over time.

#### Programme participants

The young people who participated in the programmes were typically from socio-economically deprived backgrounds with an average per capita income of R527, placing them below the upper-bound poverty line. Most had experienced food insecurity in the year prior to joining the programme. Over half had prior work experience, made up primarily of short-term work contracts with a few also indicating some self-employment experience. By and large they had obtained their matriculation certificate (most of the participating programmes set matric as the entry level requirement) with just under a third having gone on to begin a post-secondary qualification. Nevertheless, the vast majority were unemployed at baseline <sup>1</sup> and over three quarters had been struggling to transition to a job through which they could build a future for themselves and their families. Our baseline report (Graham et al., 2016) provides insights into the barriers they experienced. These included the high costs of work seeking, limited social networks through which to access information about the labour market and job opportunities, and lack of information about how to effectively look for and apply for jobs.

### Programme offerings

The YEPs that they participated in all offered an easily-accessible and low-cost programme through which they could increase their skills and access information about how to look for work. Through these programmes they could develop their technical skills across sectors including financial services, welding, computing, construction, and social services. Importantly they could also learn valuable human capability skills, defined as both soft skills such as personal development, self-efficacy and self-esteem; and workplace and work search skills such as how to develop a curriculum vitae, how to present oneself in an interview, punctuality, teamwork, and how to handle conflict. In some cases, they had opportunities to engage in work experience opportunities and in others they were matched with potential employers and invited for interviews. The full set of programme features considered in our analyses are 1) time spent on human capability skills, 2) time spent on technical skills, 3) whether the programme includes workplace experience, 4) whether the programme matches participant to jobs, 5) duration of the programme, 6) the provision of a stipend, and 7) the level of formal accreditation of the programmes.

### Financial capability component

Financial capability is defined as a combination of the development of skills relating to financial management, and the opportunity to use these skills (Johnson & Sherraden, 2007). In this project, financial skills were operationalised in terms of (a) the increase in knowledge about savings and money management, as a result of an eight-hour training module developed in partnership with Grounded Media, and (b) the opportunity to open a savings account with Standard Bank South Africa (SBSA).

<sup>&</sup>lt;sup>1</sup> For the rest of this report, the terms 'baseline' and 'wave 1' are used interchangeably.

### Overview of findings

#### Youth employability programmes positively contribute to young people's

#### labour market outcomes

By the time they had been out of the programme for roughly two years (wave 4), we found that 28% of the remaining sample had found and retained employment (278 of 977 youth)<sup>2</sup>. Furthermore, when compared to a matched sample from the QLFS data, we see that the YEP graduates are approximately 11 percentage points more likely to be employed, suggesting that they are on a better trajectory in the labour market than their (as closely matched as possible) counterparts in the national sample.

While this is certainly encouraging, we cannot directly attribute this outcome to the programmes. This is for two reasons. Firstly, young people are not randomly assigned to the programmes or sites and the programmes themselves have varying entry requirements. In addition, young people present themselves for programme participation so it is possible that they are relatively driven, motivated people compared to youth who do not apply to enrol in them. Indeed, our baseline data demonstrate that these participants typically have high levels of self-efficacy and future orientation. Secondly, we do not have a strict control group of youth who do not receive any YEP-type intervention at all with which to compare employment outcomes; nor can we match youth in the QLFS and Siyakha datasets along all the necessary characteristics, such as self-efficacy and future orientation. Nevertheless, it is unlikely these factors would completely remove the apparent 11% benefit to YEP participation, suggesting that YEPs play a positive role in helping youth to take steps into the labour market.

Importantly, we also found that where young people were employed, the nature of their employment had improved, with more persons reporting higher earnings than their previous work experience. There was no increase in the number of youth reporting to have formal contracts of employment, a measure of their employment security.

## Youth employability programmes positively contribute to further education outcomes

Two years after completion of the training we also find that just over 17% of the participants had gone on to study further. Encouragingly, we also see that there is a progression in their education trajectory; that is, they are not going on to similar training programmes but are rather managing to complete higher-level qualifications.

#### Youth employability programmes foster resilience despite unemployment

Despite participation in the programmes, the remaining 54% of participants remained unemployed or returned to unemployment at wave 4. Most of these were experiencing chronic unemployment, with an average unemployment period of 15 months. Nevertheless, most reported continuing to search for work and being hopeful of finding work. This finding suggests that the YEPs may play a role in keeping youth oriented to the labour market over time, fostering job search resilience.

#### What programme features work best?

The study findings show that the most important programme feature for predicting employment is offering matching. Matching is a process of bringing young people directly into contact with employers who are looking for the skills they have and orientating training to employer demands. Controlling for all other factors, having received matching is associated with an improvement in the probability of finding work of 28 percentage points, relative to those who do not receive matching. Furthermore, matching also emerges as the feature that best explains higher earnings amongst those who are employed.

In addition, increasing exposure to human capability skills (skills that are purported to be transferable across work contexts) tends to improve employment. Increasing the time spent on training for these skills by 10% is associated with a 0.7 percentage point increase in employment probability, all else equal. Importantly, where young people are not exposed to the matching feature of a programme, human capability skills exposure become the most important predictor of employment, and are particularly efficacious for young people who have not completed matric or been exposed to any post-secondary education and training. That is, they seem to "fill in" for the skills that young people with lower education levels miss out on.

Interestingly, exposure to work experience, the provision of stipends, formal accreditation of programmes and programme duration do not play a significant role in explaining employment outcomes.

For those who remained unemployed, having been part of an intervention that includes matching has positive effects on reducing average time unemployed. Matching also increases the number of job applications made, and the probability of still being engaged in work-seeking activity. This may reflect a greater belief in matched

<sup>&</sup>lt;sup>2</sup> The sample numbers at each wave, the reasons for dropout from the study, and how the subsequent analyses account for this missing data are discussed fully in section 3.2.

participants' own employability after having gone through a YEP that is more employer-centred. Exposure to human capability skills training also reduces the amount of time unemployed and it is positively associated with persistence in work seeking.

#### Does a financial capability intervention make a difference?

Financial capability interventions are not considered to be ALMPs. In fact, there is limited evidence as to their effect on employment outcomes. But they have been tested in various developing and developed country contexts for other outcomes and have been shown to have positive effects. For instance they have been shown to promote better secondary schooling outcomes in Ghana (Friedline et al., 2013; Chowa et al., 2015); increase financial security in vulnerable households in Uganda (Curley, et al., 2010); and promote transitions to college in poor communities in the United States (Elliott & Friedline, 2013; Elliott, et al., 2011). Could they potentially improve labour market outcomes?

Our research shows that they could. The financial capabilities intervention consisted of training in financial literacy and the opportunity to opening a savings account. At waves 3 and 4, young people who received the intervention were nine percentage points more likely to be employed than those who did not receive the intervention, controlling for confounding factors. Interestingly, youth who received the financial capability intervention did not differ in their reported savings behaviour from those in the control group. The effect of the intervention is thus likely to be attributable to the financial literacy training, and not the saving account. Further analysis to derive a more definitive understanding of this process is required.

Importantly, the financial capability intervention also has positive effects for those who remained unemployed. Those exposed to the treatment were more likely to persist with work seeking than those who did not. Again, we cannot definitely say why this is the case. One hypothesis worthy of further investigation is that greater financial literacy enables work seekers to better manage large work-seeking costs in contexts of typically low household income.

#### Implications

The above findings provide four critical insights into what we need to do to support young people as they navigate the labour market.

First, youth employability programmes play a critical supportive role. They are locally accessible, low- to-no-cost for young people, and offer support in a context of low investment in employment services for work seekers (Bhorat, 2012), particularly young work seekers. It is likely that the people who participate in the programmes are those who are already motivated and driven; indeed we do find that at baseline, participants have high levels of self-efficacy and future orientation. Nevertheless, the programmes are important connection points that can support these kinds of young people in their journey – connection points that are sorely missing in most local communities. The evidence also seems to suggest that one of the most important roles they play is in developing human capability skills – the skills that are required in the workplace, and which enhance their own sense of self in a context characterised by hardship and generalised unemployment. Building such skills emerges as a key contribution that such programmes make, and one that is particularly important for young people who have lower levels of education.

Second, the success of matching as a programme feature points to the critical role of intermediation in the labour market. Several studies have noted that one of the factors contributing to unemployment and youth unemployment is labour market inefficiency in which employers struggle to find the right employees and work seekers struggle to effectively apply for work opportunities. Interventions that can mediate this process are therefore critical. The evidence from this study, taken together with success of other intermediation services such as encouraging work seekers to get reference letters (Abel, et al., 2017) and make work search plans (Abel, et al., 2019), points to the need for effective employment services. Leveraging existing resources in labour centres to better support young work seekers could be a low-cost intervention that may bear fruit. The success of matching also highlights the benefits of YEPs working directly with employers in the development of training curricula.

Third, the evidence shows that the negative effects of two factors that usually disadvantage young work-seekers – having less than a matric qualification and living outside a metro area – can be reduced by participation in a YEP that devotes sufficient time to human capability skills training. This finding suggests that exposure to such skills training is particularly important to "bridge the gap" that geographic location and low education create in employment prospects and points to the very important role that YEPs can play in supporting young people to navigate the labour market.

Finally, it is particularly exciting to note the effect of the financial capability intervention on employment. Due to the experimental design in the study we are able to attribute this effect to the intervention itself. Those who were exposed to the intervention, despite not reporting higher savings, nevertheless do have better employment outcomes. They are nine percentage points more likely to be employed than those who did not participate in the intervention. Although the mechanisms by which the intervention works are unclear, financial capability interventions seem promising as a complementary intervention to ALMPs.



#### Conclusion

The above findings point to the important role that YEPs can play in supporting youth as they navigate the labour market. In a context of limited support to work seekers generally, and young work seekers in particular, such programmes are critical sites for promoting human capability skills, facilitating access to information about the labour market, and for mediating an interface with employers for young people. Importantly, there is some evidence to suggest that they also mitigate gaps that low education levels and geographic location can create in employment prospects. Moreover, they play a role in supporting unemployed youth to remain oriented to the labour market and persist with work seeking. The effect of the financial capability intervention is particularly encouraging and warrants further investigation regarding the mechanisms by which it works.

Does this mean that we should scale up and invest in such programmes? The encouraging outcomes occur in a labour market context of low growth where too few jobs are being created. However, it is not only low job growth that contributes to youth unemployment. Significant barriers to the labour market remain for many young people, resulting in inequalities in access to work. This situation is further exacerbated by labour market inefficiencies. In this context supply side and intermediary interventions play a critical role. Furthermore, the effects that we see of both the financial capability intervention and the YEPs are promising. Continued investment in programmes that provide support to young people to a) increase their human capability skills, b) access information about how to look and apply for work, and c) actively match young people to potential employers remains critical. The latter point is particularly important in a context of low job growth. Programmes that can work actively with employers to identify areas of job growth and train to meet these opportunities are likely to play a critical role in shifting the nature of youth unemployment. In addition, these programmes also play a crucial role in reducing disconnection from the labour market.

If we envisage a vibrant and growing economy that creates jobs, too many young people would still continue to struggle to find employment because of the many barriers and gaps they face as a consequence of poverty, geographic location and poor schooling. Youth employability programmes will therefore remain important in supporting such youth to access the benefits of a growing economy.

## 1. INTRODUCTION

Simon attended an under-resourced high school in a rural area. The school had no functioning library, no computer labs or science labs but teachers were competent and knowledgeable. Career guidance was available but not useful as Simon felt he did not know the practical steps to access opportunities. Furthermore, money was a scarce resource at home. He went through a youth employability programme and learned practical skills and is now employed on a part-time basis. He was told about his current job by someone in his village and had to travel quite a distance to apply for jobs. While this job gives him an income he still has not realised his goal of studying after matric due to lack of money.

Thandi went to a good school where teachers were strict and seemed to have invested time in getting learners to do well at school, e.g. extra classes were offered during exams. There was career guidance during Life Orientation and Thandi used the information provided but could not study because she experienced a life shock, forcing her to stay home in 2010. After searching for employment, she eventually found a job at a fast-food outlet in 2011. A little over one year of working there she left the job because there were clashes with the manager. Following this experience, and despite her efforts she struggled to find employment. She then heard about a youth employability programme through her aunt and went there the next day. She found it useful as she is now more knowledgeable than she was before. However, she felt it was not particularly useful in her job hunting as she is still unemployed. She also blames being unemployed on bad luck because she has marketed herself so widely and still has nothing to show for her efforts. Moreover, she mentions the economy and a lack of social networks.

The stories of Simon and Thandi are individual stories, drawn from the qualitative data collected during the course of this study. But they are also stories that resonate with a wide range of young people in South Africa who struggle to transition to work in a context of high rates of structural unemployment and in which young people are particularly affected. Simon and Thandi both come from low income backgrounds with high levels of food insecurity. Despite this experience, they both managed to complete their secondary education but were not able to afford further education. They thus went out to seek work upon attaining their matric certificate. They both tried many different methods to look for work, submitting their CVs in response to job adverts placed in newspapers and online, as well as visiting places of work where they left their details. They were both turned down many times, or simply did not hear back from potential employers. Both faced discouragement and despair. Both sought to increase their skills set through attending a youth employability programme in their local area, which proved to be useful sites of information, learning, and engagement.

Their stories encapsulate the realities of youth captured in multiple studies, which shows that young people's pathways to work in the South African context are staggered, and characterised by barriers and challenges that youth need to navigate with very little support (De Lannoy et al., 2018; Mlatsheni & Ranchhod, 2017; Graham et al., 2016; De Lannoy, 2008). Within this context, interventions that can provide young people with such support play a potentially critical role in facilitating smoother transitions to work. The Siyakha Youth Assets study sought to rigorously assess the role that skills development programmes run by youth employability programmes (YEPs) and a financial capability intervention can play in the transition to work for youth.

## 1.1. Diagnosing the problem: reasons for high levels of youth unemployment

Youth unemployment is a global issue that has received increasing attention in the past decade since the global financial crisis of 2009. Although global youth unemployment rates have recovered to a level of 13% for 15-24 year olds (International Labour Organization, 2017), this figure masks disparities. One of the countries with the highest rates of youth unemployment is South Africa, which has a rate of 39% if discouraged work seekers are not included, and 52% if they are included (Statistics South Africa, 2019), using an age range of 15-34 years. If the ILO age range of 15-24 years is used, South Africa's youth unemployment challenge rises to 55% if discouraged work seekers are not included, and over 60% if they are (Statistics South Africa, 2019). Younger youth face particular challenges as they seek to transition to work, but even as they grow older barriers to entry into the labour market remain for far too many youth in the country.

There are a range of reasons for the particularly high rates of youth unemployment in South Africa that have been sufficiently documented elsewhere (see for instance De Lannoy, Graham, Patel & Leibbrandt, 2018). On the demand side of the labour market there are simply insufficient jobs being created to keep up with labour supply, and particularly the large numbers of young people entering the labour market (Burger & Von Fintel, 2009; Kraak, 2013; Lekena, 2006). In part this situation arises from the dominance of a small number of large firms in every major sector and significant barriers to entry for small businesses, where there has been some job growth (Banda, 2015; Kofi-Ocran, 2019). On the supply side of the labour market there are a myriad of challenges that young people face as they seek to enter the labour market; amongst them a skills deficit, and limited social capital and access to information. Finally, challenges exist in intermediation within the labour market; that is in the manner in which the labour market operates to match work seekers with available jobs (De Lannoy et al., 2018). Although we acknowledge the myriad of challenges that affect youth unemployment, of interest to this study are two key sets of challenges – one on the supply side of the labour market and one in intermediation.



The first is the skills mismatch in the economy and in particular, the low levels of skills with which young people enter the labour market. In the early 2000s in South Africa, a policy decision was taken to promote economic growth in the tertiary sector; including financial services, business process outsourcing, and retail and hospitality; which was widely viewed to be the sector that could promise decent jobs (Seekings & Nattrass, 2005; Banerjee et al., 2007; Bernstein, 2014). However, jobs in this sector typically require higher levels of skills and many young people exit the schooling system without even the most basic skills that employers require (Horn, 2006; Raftopolous et al., 2009). This finding is testament to poor quality basic and general education to which too many young people are exposed (Spaull, 2015). A critical contributor to the youth unemployment problem therefore is the skills mismatch within the economy.

The second key challenge affects intermediation in the labour market, making it more difficult for employers and work seekers to connect. In post-apartheid South Africa, little has been done to shift the apartheid era spatial planning that sees large numbers of predominantly Black people living in areas that are situated far from the economic hubs of the country (Seekings & Nattrass, 2005). One of the main reasons that the labour market is inefficient in matching work seekers with available jobs is that of geography. Potential work seekers simply live too far away to connect with the available jobs and most live in areas where employment services are lacking (Patel et al., 2016). Given poor public transport infrastructure, the costs of both work seeking and working are often prohibitive (Seekings, 2010; Graham et al., 2016). The transport costs are compounded by data and internet usage costs (Patel et al., 2015; Graham et al., 2016). Yet, the financial costs of work seeking are rarely addressed in Active Labour Market Programmes (ALMPs).

## 1.2. Addressing youth unemployment: a suite of tools

Internationally and locally there are a range of tools that are traditionally used to address unemployment. These can be categorised into four types according to Kluve et al. (2019):

- Skills training and educational system reforms, that address challenges on the supply side of the labour market,
- Employment services that address intermediation challenges. These challenges might include providing better information to work seekers, and actively connecting work seekers with employers,
- Entrepreneurship support, that promotes growth in self-employment and in turn job creation, and
- Direct job creation through public employment and/or incentives to promote growth in jobs or the employment of particular vulnerable groups

Using this typology, it is evident that South Africa has invested heavily in addressing the challenge. A range of entrepreneurship promotion training and funding programmes are available. It has also invested in direct job creation through the establishment of Special Economic Zones and significant investments in the Expanded Public Works Programme and Community Works Programme. More recently the state extended the Employment Tax Incentive – a tax subsidy intended to promote the employment of youth. South Africa

has invested relatively little in employment services, especially when compared to countries that have a similar income level and high levels of unemployment (Bhorat, 2012). Nevertheless, the state does have labour centres that provide some support to work seekers and the National Youth Development Agency (NYDA) runs the JOBS database which provides information about available jobs to young work seekers. By far the largest number of interventions are situated in the first category. A wide range of skills training interventions have been put in place, including those through formal institutions such as universities, technical and vocational education and training colleges, and Sector Education and Training Authorities. Alongside these formal programmes a range of organisations across the private, state and not-for-profit sectors have invested in YEPs. It is the latter that are the focus of this study.

### 1.3. Rationale for the study

Within this context of youth unemployment in South Africa a wide range of YEPs have emerged. These programmes offer young people a combination of technical and human capability (soft) skills training that should, in theory, improve their chances of finding work in an economy that requires higher levels of skills. Significant financial and human resources are invested in such programmes, yet, as is the case globally (Kluve et al., 2014), very little evidence exists about their effects. In order to address this gap in our understanding the first part of this study sought to inform policy and practice about whether or not YEPs play a role in facilitating the transition to work for young people, and if so, what programme elements work to shift outcomes.

The suite of ALMPs that are traditionally applied to the challenge of unemployment typically would not include a financial capability intervention. Yet it is precisely this kind of intervention that could address the costs of work seeking. Evidence from elsewhere shows that financial capability interventions can have positive effects on other outcomes. They have been shown to promote better secondary schooling outcomes in Ghana (Friedline et al., 2013; Chowa et al., 2015); increase financial security in vulnerable households in Uganda (Curley, et al., 2010); and promote transitions to college in poor communities in the United States (Elliott & Friedline, 2013; Elliott, et al., 2011). However, financial capability interventions have not yet been tested to assess their impact on employment related outcomes. Only one study to date has reported on a financial capability intervention that was integrated into a youth workforce development programme, but the outcomes assessed focused on financial capability gains rather than employment outcomes, and the participants were low income youth who were already working (Loke et al., 2016). The innovative inclusion of a financial capability intervention into YEPs in order to assess how it might affect employment outcomes for unemployed youth is thus a novel contribution. For this reason, we sought to design and test a financial capability intervention as a tool that might facilitate better transitions to work for YEP participants.

## 1.4. Aim and objectives

Given the above background, the overarching aim of the study was to assess whether the YEPs on their own, and in combination with a financial capability input enhanced the employability and employment/livelihood outcomes for poor young people in both urban and rural areas who were between the ages of 18 and 34 years. The objectives related to this aim were to:

- Design and roll out a financial capability intervention for young people participating in YEPs
- Assess the employability, employment and education outcomes for participants of the YEPs, and how these are impacted by different programme features
- Assess the impact of a financial capability intervention on the employability, employment and education outcomes for participants
- Make proposals for a high impact policy and programmatic intervention that complements current interventions but that will build and strengthen youth assets and employability.

### 1.5. Study description

The intention of the project was to learn from and highlight existing programme design in a process of "learning from below". It therefore built on the work of eight existing YEPs that aim to enhance the employability of young people. More specifically it includes those programmes that firstly offer human capability skills (that is, personal and workplace skills that enable young people to function effectively in the work environment); secondly, technical and or vocational skills; and finally, opportunities to increase work experience and exposure in order to prepare them for the labour market and smooth their transition to employment.

Youth employability programmes that form part of the study include: loveLife groundBREAKERS, Fit for Life Fit for Work, Thabiso Skills Institute, Raymond Ackerman Academy, Harambee Youth Employment Accelerator, the National Youth Development Agency YouthBuild programme, Afrika Tikkun Training Services, and the EOH learnership programme. Taken together, these organisations and programmes represent a significant investment in training provision for the workplace and offer accessible alternatives to formal post-secondary education for young people.

In addition, we designed a financial capability intervention focused on encouraging young people to save a small amount of money that could then be used to achieve their educational or employment goals. The financial capability intervention was made up of two parts – an eight-hour training module, designed in collaboration

with Grounded Media, which could easily be added to the existing curricula of the programmes; and the offer of a no-cost savings account with Standard Bank South Africa. Both the YEPs and the financial capability intervention components were assessed using a mixed-methods, comparative research design.

#### Overview of the methodology

There were two elements to the study design. First was a non-randomised component, aimed at understanding the relative effects of different programme features on outcomes of interest. Because we could not randomly assign participants to programme types or sites (they present themselves to the training of their choice in the area most suitable to them), we could not treat this component as an experiment. Nevertheless, the analysis methods allow us to assess the relative effects of the programme features and control for a range of potentially confounding variables. In addition, we built a sample from the QLFS data that was statistically matched to the Siyakha sample on variables measured in both studies. We use this similar sample to compare labour market outcomes to estimate the effects of YEP participation.

The second component is an experimental, randomised component aimed at assessing the impact of the financial capability intervention on our outcomes of interest. In this component, half of the 44 YEP training sites were randomly assigned to receive a financial capability intervention consisting of a short savings training module and access to a no-cost bank account in addition to the usual YEP training. We were thus able to assess whether the addition of a financial capability component as a complementary intervention to the YEP training, enhances outcomes for young people. The experimental design allowed us to test the effect of the treatment (the financial capability intervention).

In both components a pre- and post-test design is used to assess change over time. In addition, we assessed outcomes over a longer period (up to two years' post-completion). In each site we collected data from a sample of participants as they enter the programme (wave 1), as they exit the programme (wave 2), on average a year post-completion (wave 3) and finally, 24 months after programme completion (wave 4).

Finally, we complement the above surveys with in-depth interviews, conducted with 48 programme participants, each selected because they had different employment and education outcomes. The purpose of this component was to qualitatively assess the role played by the youth employability programmes in young people's pathways to work.

#### Limitations and delimitations

We have to acknowledge that this study is one amongst a plethora of studies that focus on the supply side factors that shape unemployment in the country and what can be done to address them. However, critical to the challenge of youth unemployment is the limited growth in jobs on the demand side of the labour market. We thus acknowledge that any intervention on the supply side is likely to have a limited effect at best and that there remains a need to understand how to shift outcomes on the demand side of the labour market. An aspect connected to this point is that most studies focusing on supply side interventions fail to account for the displacement effects. In other words, if we see positive results of a ALMP on the supply side, the individuals gaining jobs could simply be replacing others in the labour market without an increase in the overall number of jobs (McKenzie, 2018). While we acknowledge this point as a limitation of the study, we nevertheless make the case for why a focus on supply side interventions is warranted.

A second limitation of this study is that we are not able to attribute any effects that we see to the YEPs themselves because it was impossible to include an adequate comparison group against which the YEP participant outcomes could be compared. A core contribution of this study however, is on understanding what programme features seem to work best to promote better outcomes.

### 1.6. Conclusion

In summary, this study sought to build evidence, based on what is already being implemented to address the challenge, in terms of what works in fostering better employment outcomes for young people who struggle to navigate labour market pathways. Drawing on the social development approach and youth development lens, which prioritises the agency of young people, we developed a conceptual framework to understand how YEPs and a financial capability intervention might improve outcomes for young people. Following a pre- and post-test study design, complemented with in-depth qualitative data, the evidence provides insight both into what programme features play a role, and how a financial capability intervention shapes outcomes for YEP participants, and seems to suggest that both have an important role to play as one of a suite of ALMPs to address youth unemployment.

## 2. SITUATING THE SIYAKHA YOUTH ASSETS STUDY

When the Siyakha study was conceptualised in October 2012 much of the research on youth unemployment in South Africa had been focused on understanding the problem. Very little research at the time had sought to understand what interventions work to address the challenge. This situation in the literature was not particular to South Africa. At the time of writing a protocol to conduct a systematic review of evidence on the effectiveness of ALMPs to address youth unemployment, Kluve and colleagues (2014) noted that while there was significant investment in youth unemployment interventions, there was limited evidence about what interventions work to improve labour market outcomes for youth, particularly in developing country contexts. Only 13% of interventions identified included evaluative evidence strong enough to assess impact. Furthermore, gaps in evidence were particularly glaring in SSA (Kluve et al., 2014). A notable exception to the story was the Latin America region where countries had been experimenting with various kinds of interventions and producing good evaluative evidence since the 1990s (J-PAL, 2017). In 2007, Betcherman and colleagues conducted a meta-analysis of the available evaluative evidence of 289 studies in the Youth Employment Inventory (2007). They noted that only a quarter of these studies had sufficiently rigorous evidence to point to impact. By 2017 the evidence landscape had shifted quite substantially. Increasingly research has focused on the effects of ALMPs in various contexts, with several meta-analyses being conducted on this available evidence. The Siyakha study offers insights from the South African context into the role that YEPs play in shifting labour market outcomes for youth. Importantly, we provide evidence about the effect of a financial capability intervention as a complementary mechanism to promote employability.

## 2.1. What do we know about the effects of ALMPs?

In this section we report briefly on the results from several studies, including a few meta-analyses of evidence about what the overall effects of ALMPs are, before moving on to understand the evidence on what works in skills training and development programmes specifically.

The first conclusion that runs across many of the meta-analyses is that reviewed programmes do show small positive effects. In the Betcherman study (Betcherman et al., 2007) 60% of programmes that had rigorous design suitable for assessing impact showed positive effects on either employment or earning outcomes. Many studies suggest that participation in youth workforce development programmes in Latin American countries such as Argentina, Mexico and Colombia and other developing countries such as Liberia are positively associated with employment and earnings (Aedo & Nunez, 2004; Attanasio, Kugler, & Meghir, 2008; Monk, Sandefur, & Teal, 2008). Programme participants were also found to be more likely than non-participants to find formal employment and to experience increases in wages over time (Attanasio, Kugler, & Meghir, 2008; Blattman, Fiala, & Martinez, 2008; Ibarrarán & Shady, 2009; Blattman, Fiala, & Martinez, 2013). However, the meta-analyses do note that the effect sizes are small. For instance Card and colleagues (2018) note that while there are positive outcomes of ALMPs, specifically human capital development programmes, these are small in the short-term; a finding that is confirmed by J-PAL (2018). In the most recent systematic review, a third of programmes were shown to be successful (Kluve et al., 2019) but the gains were small, a finding that confirms that of McKenzie (2017) who notes, in his review of ALMP evidence in developing countries, that typically employment outcomes are two percent higher for participants than for non-participants in interventions. In summary, short-term outcomes are positive but the effect sizes are small. However, when we consider longer-term outcomes, the effects are larger. Card et al. (2018) and J-PAL (2018) concur that participants of ALMPs have encouraging longer-term outcomes including job retention and increases in earnings. In a study evaluating the long-term impact of a randomised vocational training and job placement programme in Colombia, evidence suggests that employment in the formal sector as well as earnings improved and that these programme effects were sustained over time (Attanasio, et al., 2017).

Compared with employment and income-related outcomes, fewer studies have evaluated the effects of ALMPs on more proximal outcomes such as work-readiness skills, employability, and re-enrolment in higher education or other training programmes. Employability refers to the skills and attributes that make young people more marketable in the workplace, and that may assist them to navigate the labour market and workplace more effectively (Harvey, 2001; Pegg et al., 2012). Nonetheless, some evidence, predominantly from Europe and the United States of America but also including a few cases in Latin America, suggests that ALMPs are associated with positive outcomes such as acquisition of business-related skills (e.g. business planning, marketing, and financial management), cognitive skills (e.g. differentiating needs versus wants, decision-making), emotional coping skills (e.g., higher self-confidence and self-esteem), positive time use (e.g. spending more time enhancing, practising and learning skills), and other life skills (e.g. positive work ethic, financial literacy) (Eberly & Sherraden, 1990; Flanagan et al., 1998; Funk, 1998; Perry & Katula, 2001; Murray & McKague, 2010; Whalen, 2010; Blattman & Annan, 2011). However, little is known about whether the observed effects on work-readiness and life skills are applicable across different sub-populations of youth (e.g., low-income youth, out-of-school youth, and youth from rural areas).

Some programmes have also been shown to positively impact other economic activities of youth. We may refer to these as multiplier effects. For instance, a systematic review of entrepreneurship programmes shows

that they increase saving and borrowing activities among youth (Cho & Honorati, 2013). In Liberia they were found to positively influence the accumulation of assets, particularly household durable assets (Blattman & Annan, 2011).

There is contestation over whether skills training programmes are more effective than entrepreneurship programmes. While Card, Kluve and McKenzie (2010) claim that programmes that combine apprenticeship, classroom vocational skills training, life and work-readiness skills, training vouchers, and job matching tend to be more effective in influencing employment than entrepreneurship programmes, Cho and Honorati (2013) found that the balance of evidence suggests that entrepreneurship programmes are in fact more effective in employment outcomes than other types of programmes. Fox and Kaul (2018) found similar evidence – that programmes focusing on self-employment had more positive outcomes on wage employment than training programmes for wage employment. The evidence on entrepreneurship versus wage employment skills training outcomes is therefore mixed.

What is evident however is that outcomes are typically better in low- and middle-income country contexts than in higher income country contexts; and that effect sizes are larger when interventions are targeted at the most disadvantaged groups (Betcherman et al., 2007; McKenzie, 2017; Kluve et al., 2019). However, most of the reviewed studies focus on interventions that have targeted disadvantaged youth in urban areas (Arthur-Mensah & Alagaraja, 2018). Few consider programmes for rural youth. This finding is most likely because skills training programs are often seen to be more effective in more dynamic local contexts such as urban areas, where there is actual demand for the skills provided (Ibarraran, et al., 2015). One notable exception is a study conducted with youth in a rural area of the state of Bihar in India (Chakravory & Bedi, 2017). It found that while there were initial positive outcomes for participants (29 percentage point increase in employment), these outcomes were not sustained over time, due to labour market factors such as workplace discrimination.

Finally, there is increasing acknowledgement that displacement effects of ALMPs are poorly understood. Few intervention evaluations are able to adequately account for net labour market effects. In other words, we do not understand whether programme participants are displacing others in the labour market queue or in existing jobs, with no overall gain in jobs within the wider labour market (Card et al., 2017; McKenzie, 2017). A notable exception is Attanasio et al.'s study on vocational training in Colombia, which noted no evidence of displacement impacts (2017). It is difficult to assess displacement effects and therefore evidence in this regard remains limited.

## 2.2. What do we know about what works in youth employability programmes?

Critical to the development of our understanding of interventions is answering the question of "what works"; that is what programme elements and design features play a role in shifting labour market outcomes for youth? The lack of evidence in this regard has been noted by Kluve and colleagues (2014) and was one of the main reasons we embarked on the Siyakha Youth Assets study. Although evidence is limited, there are some findings about programme elements that seem to be associated with better outcomes. These elements are further discussed in the following paragraphs.

Interestingly, across the meta-analyses there is agreement that no one kind of ALMP emerges as more successful than another (Betcherman et al. 2007; Card, et al. 2018; Kluve et al. 2019). However, programmes that integrate multiple interventions are more likely to have a positive impact than those that focus only on one component, such as technical skills training (Kluve et al., 2019). This is probably because in lower income settings the needs of young people are diverse, requiring multi-faceted interventions.

The review of literature demonstrates consistently that working with employers increases chances of success (Barr 2016; Puerto, et al., 2016; Fox & Kaul, 2018). The corollary of this finding is that programmes that are less targeted to local labour market demands and do not work with employers, face challenges in terms of facilitating access to employment opportunities for participants (Arthur-Mansah & Alagaraja, 2018). McKenzie (2017) notes that this result has likely led to a greater policy emphasis that orientates training towards the needs of the private sector and involves the private sector in such interventions. Kluve et al. (2019) suggest that when programmes work with employers, better outcomes are likely explained by the fact such programmes inherently address the needs of both employers and job seekers; that is, they are more likely to address supply-related, demand-related and intermediation challenges in the labour market.

A consistent finding is that combinations of training types have better success. For instance, Fox and Kaul (2018) and J-PAL (2018) found that on-the-job and classroom-based strategies are more effective than classroom only training. Further, J-PAL (2018), in a review of interventions across Latin America, found that interventions that combine cognitive and non-cognitive training are more effective than cognitive only training. Puerto, Kluve and Rother (2016) found that programmes that combined skills training with job search assistance and matching were more likely to succeed than those that focused only on one element. This finding was confirmed by Barr (2016), who notes that a key success element is training young people comprehensively to equip them with a wide range of skills rather than narrowly focused technical skills. Ibarrran et al. (2015) note that a holistic approach that focuses on education and vocational training produced better employment rates for youth than programmes that focused only on job search assistance, and that these gains were sustained over time.

## 2.3. Financial assets as a mechanism to activate employability

Interestingly, a factor that has largely been missing from design of ALMPs, is an assessment of how access to financial assets and the promotion of financial capabilities can shape employability, employment, and earnings outcomes. Often income (measured as earnings) is seen as an outcome of programmes. However, it has not been conceptualised as an input, despite ample evidence showing that the costs of work seeking severely hamper young people's chances of finding work and accessing post-secondary education and training (Seekings, 2010; Branson & Khan, 2016).

Income for the poor has largely been assessed in the social protection, specifically cash transfers, literature. Within this literature there is recognition that approaches to addressing poverty have largely focused on mechanisms that ensure a basic income level for the poor, often through the provision of grants or goods that ensure that a minimum level of living is met. Common to almost all conceptualisations of welfare policy therefore is its contribution to consumption-smoothing – the provision of a level of income which would enable households to maintain a previously defined level of immediate consumption to satisfy basic needs. In many countries, including South Africa, large numbers of poor people derive a significant proportion of their earnings from grants disbursed by the state. This focus on income, however, is argued by Sherraden to be a factor which has "sustained the weak without making them strong" (1991) and thus he advocates interventions that build the assets of the poor. He defines assets as they are defined in business – as tangible and intangible capital that can be accumulated and used to generate more income, assets or wealth over time. Examples include education, career, home ownership, and business. Asset accumulation, he argues, is key to strengthening poor households.

Financial capability is a crucial factor in developing financial assets in the form of savings. The concept can be defined as a combination of financial literacy imparted through financial education coupled with the means to enact that knowledge through access to financial services and products (Johnson & Sherraden, 2007). Improving savings knowledge could impact savings behaviour, in turn allowing for youth to make productive investments. For example, savings could facilitate job search, or meet the costs of higher education, and in turn the likelihood of finding work. The financial capability intervention thus consisted of a standardised financial literacy eight-hour module that was incorporated into the existing YEP curriculum at the treatment sites, and access to a no-cost savings account provided by Standard Bank South Africa.

We view financial asset interventions such as savings and financial education as one amongst other interventions aimed at promoting human development outcomes. In line with the social development approach discussed below (Patel, 2015), we hypothesise that a combination of interventions that include financial assets development (alongside for instance human capability development) are more likely to result in positive outcomes than any single intervention.



Financial and other asset accumulation is shown to have a range of positive effects. For the purposes of this study, we were most interested in how asset ownership, including financial assets, can shape transitions to education and work. Literature shows that savings is associated with changes in the way in which people perceive their futures. Stimulating the development of financial assets can make the path to further education seem more 'open', or more achievable, and hence bring about more future-oriented and positive behaviour (Destin & Oyserman, 2009). In addition, financial assets have been found to raise parents' expectations for their children (Elliott & Sherraden, 2013), and thereby increase the likelihood that they will take steps to save for their children's future education. Moreover, ownership of savings accounts has been found to be a significant predictor of college enrolment and progress in the United States (Elliott & Friedline, 2013).

Applying the theory of asset building to young people is a more recent endeavour. If people save when they are young, they are more likely to save later in their lives (Chowa et al., 2015). Similar findings are outlined by Elliott and Friedline (2013) who found that when savings accounts were owned as children, young adults were twice as likely to own savings accounts, twice as likely to own credit cards, four times as likely to own stocks, and had significantly more total assets, both financial and non-financial. Furthermore, the earnings flowing from the ownership of financial assets compound over time with larger assets also providing higher earnings.

Savings are also associated with a greater sense of control amongst young people. When youth own their own financial assets, they feel a greater sense of control over their own lives (Elliott, et al., 2011). It was also found to enable the development of resilience and self-efficacy, which are strong predictors of academic performance and progress through college in the United States (Elliott et al., 2011; Elliott & Sherraden, 2013).

Research attention has also been paid to how savings might affect education outcomes. In a four-country study on youth savings, conducted in Ghana, Nepal, Colombia and Kenya, research shows that young people who are saving are often doing so to pursue further education (Johnson et al., 2013). Research in various countries in Africa including Uganda, Kenya and Ghana demonstrates that savings behaviour is associated with better school achievements (Chowa, et al., 2010). In Ghana, financial assets of the household are strongly associated with better school outcomes (Friedline et al., 2013), but this achievement is in turn mediated by higher educational expectations that young people from households with more household assets have (Ansong, et al., 2015). Higher educational expectations and achievement may in turn result in better employability outcomes.

The field of financial capability and asset building has thus received much research attention, with rigorous studies demonstrating positive effects. Despite this finding, there has been very little attention paid to how financial assets can shape outcomes for youth in South Africa. Research is required to better understand the youth savings culture in South Africa and what kinds of financial products are likely to appeal to young people. Research on *stokvels*<sup>3</sup> suggests that few young people are members of stokvels (Centre for Social Development in Africa, 2013). Young people's savings culture might be a local contextual factor that may constrain savings outcomes.

Most important, rarely have studies examined a) the employability and employment outcomes of financial capability and asset building interventions and b) the *combined* effects of youth employability programmes and financial capability programmes on employability and employment outcomes are. This study addresses these gaps in knowledge.

The evidence presented in the above sections demonstrates the lacunae in our knowledge on youth employability interventions, and areas of promise that emerge from studies conducted elsewhere – both in relation to employability programme design and financial capability inputs. This evidence provides the basis for the theory of change that was developed for this study.

## 2.4. A youth development approach to understanding pathways to the labour market

Many youth interventions approach young people from a remedial point of view, starting with a focus on their deficits, and not prioritising their agency. For instance, programmes are often conceptualised to address young people's skills deficiencies or lack of workplace and job search awareness. While we acknowledge the gaps in young people's skills, we take a youth development approach to youth employability that begins with an assumption that young people have agency and capabilities – in the form of some education, energy, high hopes for themselves, a sense of self-efficacy and determination. Starting with this assumption we argue that employability interventions that harness and channel the capabilities of young people could support and enable them to make a smoother transition to work.

A youth development approach to employability is rooted in Sen's capabilities approach (1999). For Sen (1999), "development can be seen [...] as a process of expanding the real freedoms that people enjoy" (1999:3). Thus, rather than seeing development as a measure of income outcomes only (or in the case of employability as employment and earnings outcomes), Sen advocates a much more human-centred view of development. This view insists on creating the circumstances under which people can be free agents in their own lives. Thus, freedom is a means to development. However, Sen is insistent that freedom is also an end in itself

<sup>&</sup>lt;sup>3</sup> Community-based peer savings groups

and thus becomes a "constitutive part of development" (1999:4). Freedom in this context is understood as being a state in which people are able to fully realise their capabilities, in contrast to a state of 'unfreedom', which limits the ability of individuals to pursue their capabilities. Freedoms are therefore essential in that if they are present, individuals can use their agency, access opportunities and pursue their capabilities, thereby fostering development. We therefore conceptualise both youth employability programmes and financial capability interventions as interventions that could expand the freedoms of young people, which in turn will enable them to fully realise their capabilities.

According to Patel (2009) youth development is conceptualised in at least three ways. The first is development as it is conceptualised in the life course; that is physical, emotional and social maturation of young people. This perspective on youth is often used in developmental psychology. The second conception of youth development is practice-oriented and refers to programmes and youth work that is focused on enhancing youth's developmental outcomes. The third conception of youth development is understood to be a theoretical approach that is embedded in the capabilities approach and which takes as its starting point young people themselves and what they actually want to be and are able to do (Nussbaum, 2001). Such an approach is therefore youth-centred and requires researchers and those working in the field of youth development to embrace at least three key assumptions: 1) that young people have strengths, assets as well as resilience that can be built upon; 2) that we need to create spaces in which young people's voices are heard; and 3) that we work alongside young people towards their social inclusion and greater participation in society in the present as well as for the future good. Furlong (2009:1) notes that thinking in the field of youth studies has gone some way to embrace this shift in thinking, focusing increasingly on individual agency and the ability of young people to shape their biographies, while still acknowledging that structural impediments do shape their ability to make choices.



Applying a capabilities lens to youth (un)employment is crucial as work is viewed as a key capability. Work is not simply about material well-being, although this aspect is central to the capabilities approach (Sen, 1999; Nussbaum, 2001). Work is also about being able to have control over one's environment; exercising practical reasoning; and entering into meaningful relationships of mutual recognition with other workers as key capabilities (Nussbaum, 2001). Work (whether in the formal or informal sector) is therefore a fundamental aspect of capability and freedom as it addresses various aspects of the human condition.

A youth development approach to young people shifts our practice orientation away from dealing with problems after they have occurred towards implementing policies and programmes that work to enhance the agency and capabilities of young people. Such an approach is promotive and preventative. Applied to employability, it shifts the question from "how do we address youth unemployment?" towards "how do we support young people to make a smoother transition to the labour market?" It asks us to consider not just the young person's labour market related skills and potential, but to work with a young person in a holistic fashion – connecting with their interests, agency, and dreams; emphasising their talent and energy; and supporting them to overcome any personal, household and structural barriers they face.

A youth development approach that is rooted in the capabilities framework aligns well with the social development approach to policy and practice. The social development approach (Patel 2015), rooted in a human rights framework, advocates for interventions that enhance the well-being outcomes of people. In this way it departs from approaches that focus only on economic outcomes or only on social outcomes. It argues rather that interventions that seek to address both social and economic needs of people are critical to enhancing people's well-being.

The social development model is a pluralistic one, noting that the state, private sector and civil society all have unique strengths, positionalities in society and access to different resources, that when combined can bring about better outcomes in society.

Applying the social development approach to youth and employability provides the theoretical backdrop for the theory of change presented below. As mentioned above, our starting point is to view young people as active agents that have assets and capabilities with which to work and that any intervention should seek to enhance opportunities for them to participate and activate those assets and capabilities, both within the intervention and as an outcome vis-à-vis greater participation in the labour market. As demonstrated in the theory of change below a key feature of the social development approach when applied to employability is a consideration of the connection between both social and economic interventions. In this study we are testing the combination of human capital development interventions and financial capability interventions. Furthermore, we are interested in both social and economic outcomes - whether such interventions strengthen the social, personal and financial assets of individuals. In addition, the approach shows us how to address the challenge pluralistically; that is, to think about the assets that institutions across sectors bring to the youth employability question. For instance, non-governmental organisations are well placed to reach young people at the local level. The state often has the resources needed to support such programmes and can also intervene to enhance demand for young workers in the labour market. Private companies are viewed as partners as they are the primary employers. Applying pluralism to youth employability means activating partnerships that synergise the strengths of all sectors.

The social development approach is a normative one and shapes current social welfare policies in South Africa. There are however, significant gaps in the implementation of welfare, education, health, employment and economic development policies that have impacted negatively on the social and labour market inclusion of young people (Patel, 2015). Systemic failures in social provision and in the educational system were alluded to previously, which in turn affects young's people's future employment prospects. Youth employability programmes therefore fill an important gap in addressing these systemic failures.

Having considered the broad theoretical basis for the study we now turn to explaining the theory of change that emerged from both the theoretical approach and our analysis of employability programmes that were operating in the country at the time of planning for the study.

## 2.5. Conceptualising pathways to the labour market for youth – a theory of change

In order to test the role that YEPs and the financial capability input play in facilitating the transition to employment we conceptualised a potential theory of change, which outlines the possible pathways through which such interventions could work. The theory of change draws on the existing evidence on ALMPs and the theoretical and empirical insights from the social development and capabilities lens as well as the financial capability approach discussed above. The conceptual framework depicted below synthesises these ideas and was our starting framework when we prepared for the study.

The Siyakha Youth Assets research project can be conceptualised graphically as follows:



Figure 1: Conceptualising pathways to youth employability and employment

Four clusters of variables are crucial to the outcomes we were interested in studying. Drawing on the work of positive youth development theorists (Catalano et al., 2002; Pittman et al., 2003) and the capabilities approach (Sen, 1999), on the left side of the diagram is cluster 1 which consists of background variables such as the individual assets that young people may have at the point at which they are ready to transition out of the schooling system and begin taking steps towards employment. In addition, demographic and socio-economic characteristics including their age, gender, race and socio-economic status amongst others are also pertinent to whether they will effectively transition to work. For instance, many middle-class young people will leave school and enter immediately into further education or training programmes that will place them in good stead to find work. Those without access to the financial assets to access such institutions will not be able to take such a step smoothly. Thus, for some there may be a more direct pathway to further education and/or employment, while for others intermediary organisations are necessary to enable them to take those steps.

Cluster 2 outlines the two intervention types that are being tested: 1) the YEPs, that have different programme inputs; and 2) the financial capability input (training and bank account).

The third cluster consists of a set of variables that may mediate or moderate the outcomes. Mediating variables are those aspects that are hypothesised to be the mechanism promoting the cluster 4 outcomes. Moderating variables shape the strength of the effect between the programme inputs and the cluster 4 outcomes (Tsang, 2015). We hypothesise that there are two types of mediating or moderating variables: individual level psychosocial characteristics and programme features. Including the former is based on the recognition that human agency may play an important role in mediating how young people might use the programme inputs and that the programmes may shape the young person's agency (in the form of self-efficacy, future orientation and self-esteem for instance) which in turn affects their ability to find work (Catalano et al., 2002; Catalano et al., 2004). In addition to these individual factors, programme design features such as the length of the intervention and how well the programme is run may also influence the outcomes.

Finally, in cluster 4, the primary and secondary outcomes that were assessed are identified. Employability is defined as individual characteristics that are attractive to potential employers and are considered to be predictors of success in the workplace (Pegg et al., 2012). These predictors include acquisition of human capability skills, job preparedness skills, technical skills, and enhanced knowledge of for instance numeracy and literacy. Employability outcomes are referred to as primary outcomes in this study and may be evident in the course of programme participation (short-term outcomes). Longer-term outcomes (actual employment, access to further education and training, securing of a sustainable livelihood possibly in the form of self-employment, and earnings) are referred to as secondary outcomes in this study and are likely to only be realised after programme participation.

As the study progressed and the variables were operationalised, the theory of change was simplified. The diagram below depicts what variables were ultimately assessed and how this assessment was achieved in each of the clusters.



Figure 2: Theory of change with operationalisation of variables

## 2.6. Conclusion

The South African youth unemployment landscape is complex and multi-faceted. It is driven by global trends in economic competitiveness as well as the national factors including the chosen economic growth path, which is viewed as leading to low labour absorption. It is also shaped by inequalities in education, location, social capital, and income; which in turn constrain access to the labour market, particularly for poor youth. The complexity of the issue points to the fact that a multiplicity of interventions is required. We focus on just two - that of youth employability programmes aiming to expand the skills of young people, and a financial capability intervention consisting of financial literacy education and access to a savings account. The conceptual framework sets out the theory of change that informed the study including the outcomes that were evaluated. The next chapter sets out the design and the method of the study.

## 3. METHODOLOGY

The study aim was to test the outcomes of YEPs both on their own and in combination with a financial capability intervention. In order to achieve this aim, we employed two approaches within the same study: a cluster randomised, experimental design to test the effect of the treatment (financial capability intervention); and a non-randomised component to assess the relative effects of different programme features on our outcomes of interest. For the latter component we also matched the study participants, as closely as possible, to a sub-sample of the QLFS data to assess whether employment outcomes for the YEP participants were different than for a general sample of similar youth. For both components, a pre- and post-test survey design was included to assess change over time.

In addition to these two main components, we complemented the study with a qualitative component to understand the participants labour market experiences and the perceived role of the YEPs therein.

As mentioned above, the inspiration for the study came from an awareness of the innovation of organisations running YEPs and an interest in assessing the effects of what was already being rolled out as well as how a financial capability intervention might complement these offerings. A key element of the research design therefore was to reasonably compare a wide range of programme offerings and assess their effects.

This section outlines the nature of the youth employability programmes, the research design, methodology, sampling and implementation of the study.

#### 3.1. Implementing partners

The implementing partners were recruited in 2013. Two implementing partners (loveLife and NYDA) attended a Round Table discussion in October 2012 at which the concept for the study was discussed. Both agreed to participate. From there the study team began investigating what other youth employability programmes were in existence and interviewed programme managers to assess whether the programmes met the inclusion criteria (discussed below). If they did, they were approached to participate in the study. Benefits to the implementing partners included an independent evaluation of their programme as well as access to the financial education module and materials to be rolled out as they saw fit once the baseline data collection was completed. Eight implementing partners were included in the study. Although the implementing partners delivered a wide range of intervention types there had to be some similarities to ensure there was an element of comparability. All of the interventions had to:

- Offer human capability skills training (made up of personal development skills and workplace skills that are pertinent to the general work environment e.g. self-esteem, leadership, communication skills) <sup>4</sup>
- Offer technical skills training (skills that are pertinent to particular job types e.g. welding, call centre skills)
- Include participants between the ages of 18 and 35 years
- Run the same programme at more than one site.
- Run the programme for not more than one year.

#### Programme descriptions

Despite the similarities in the programmes discussed above, the eight partners represent varying youth employability interventions in terms of reach, type of technical skills and length of programme.

In terms of reach, Harambee engages with the largest number of young people annually through their various programme offerings – from one day assessments through to full bridging programmes. Only two of the bridging programmes were included in our study. Harambee assesses 100,000 individuals per year and approximately 9,200 persons participate in their various bridging programmes. The other programmes reach comparatively fewer participants, but are also longer in duration than Harambee's programmes. IoveLife reaches approximately 1,200 groundBREAKERS who participate in a year-long programme. NYDA YouthBuild – also a year-long programme – reaches 500 youth. The other programmes range from 12 weeks to six months in duration and reach between 100 and 500 young people per year. In total, the programmes put approximately 12,500 participants through skills training each year.

<sup>&</sup>lt;sup>4</sup> Sometimes referred to as soft or life skills

Most of the organisations had sites in at least two provinces (Gauteng and the Western Cape) with the only exception being Thabiso Skills Institute which runs in Gauteng only. IoveLife groundBREAKERS was the largest programme with operations in all nine provinces. The NYDA and EOH have sites in three provinces. Harambee also has sites in multiple provinces although we could only include their Gauteng sites in the study for logistical reasons. There is an urban bias in the programmes with a concentration of training sites in metropolitan areas. NYDA and Fit for Life, Fit for Work (FFLFFW) had a specific focus on including rural youth and loveLife has a national footprint.

The programmes represent the value of pluralism in social development with organisations from various sectors rolling out programmes. EOH was the only private sector partner but Harambee has close associations with private sector clients who use their services. The NYDA was the only national government partner. Their programme is rolled out primarily through local municipalities. The remaining partners were civil society organisations. The organisations are funded through a combination of state funding (such as the Jobs Fund, national government department budgets, local municipal budgets), private sector funding (such as Corporate Social Investment spending and Human Resource expenditure), and philanthropic disbursements. Together they represent a significant investment in addressing the issue of youth unemployment.

The programmes train young people for different sectors of the economy, with each programme dedicating some training time to the provision of specific technical skills (and to varying degrees). Some such as NYDA YouthBuild and TSI, trained young people in artisanal work such as welding and construction. Others, such as Harambee, ATS and EOH, were training for office work in the business process outsourcing, information and communication technology, and financial services sectors. Harambee also trained youth for the retail and hospitality sector, while FFLFFW train youth in computer skills. Only loveLife trained youth for the social sector, and Raymond Ackerman Academy was unique in its entrepreneurship focus.



They also have different foci on human capabilities skills training. These include general workplace skills aimed at enhancing employability, and include (amongst others) job application modules, life skills and self-esteem training, and workplace competences such as time management and communication skills. Some of the programmes have an extensive focus on this element while for others it is not a core component of the curriculum.

The programmes had different ways of providing youth with workplace or practical experience. While some ensure that their training simulates the workplace, others provide opportunities for on-the-job experience. Workshops for artisanal training ensure that TSI participants have practical experience of the tools and methods they will be required to use. EOH offers work placements with supervisor support to participants. NYDA YouthBuild and loveLife expect participants to engage in a year of service to their communities in order to develop workplace experience. Some of the programmes also offer opportunities for "matching" where they make attempts to place participants into jobs that match their (new) skills profiles, either as a core feature of the programme or on an ad-hoc basis where possible. In the literature on youth employability, work experience and matching have emerged as strongly associated with better employment outcomes (Attanasio et al., 2017; World Economic Forum, 2014).

The programmes also differ along the final three features, both of which are hypothesised as influencing the success of the interventions in the theory of change presented above. The first of these is the length of the programmes, which is highly correlated with work experience (longer programmes also provide work experience training). There is no consensus regarding whether longer programmes are necessary for intensive skills training or whether the extra training represents unnecessary time spent out of the labour market. Secondly, having cash available may stimulate job search and/or just the ability to remain in the programmes. Moreover, receiving a stipend may enhance the ability of treatment participants to put their newly-acquired financial literacy into practice. Four of the programmes offer stipends. Finally, some programmes offer training that is accredited with the South African Qualifications Authority, while others do not. Qualifications at higher levels of accreditation as per the National Qualifications Framework (NQF) may provide positive signals to potential employers about the aptitudes of job applicants.

From here on, the programme names are anonymised. We do this to ensure that as we assess what programme features work we do so in a way that keeps the focus on features as opposed to the programmes themselves. We also do not want to advantage or disadvantage any particular programme as a result of this study. Each makes an important contribution in different ways and this study should not undermine this aspect.

Table 1 gives an overview of the diversity of programme features that were tested across the programmes.

	Human capability skills	Technical skills	Work experience	Matching	Duration	Stipend	NQF Level
Programme 1	4 weeks	Not core focus	None/ simulated	None/Ad hoc	2 months	No	1
Programme 2	1 week or less	Core focus	Substantial	Central focus	12 months	Yes	3 or higher
Programme 3	5 weeks	Not core focus	None/ simulated	None/Ad hoc	1.5 months	No	None
Programme 4	1 week or less	Core focus	None/ simulated	Central focus	0.25 months and 2 months⁵	Yes	None
Programme 5	3 weeks	Not core focus	Substantial	None/Ad hoc	12 months	Yes	3 or higher
Programme 6	1 week or less	Core focus	Substantial	None/Ad hoc	12 months	Yes	3 or higher
Programme 7	1 week or less	Core focus	None/ simulated	None/Ad hoc	6 months	No	3 or higher
Programme 8	2 weeks	Core focus	None/ simulated	None/Ad hoc	3 months	No	2

Table 1: Summary of selected features of participating organisations

There are thus seven programme features along which the YEPs differ substantially; all of which may be more or less useful in terms of enhancing employment probability. We can therefore assess these seven features' effects on employment outcomes relative to one another. However, unlike the financial capability treatment, individuals or sites were not randomised into these different programmes since young people present themselves to the programme of their choice. Table 2 and 3 in section 3.1. illustrate the extent to which participants at the eight YEPs differed at baseline.

In order to meet the different aims of the study two related approaches were used in the study design. In order to assess the impact of a financial capability intervention on labour market outcomes, a randomised, experimental research design was employed. In order to assess how employment outcomes are shaped by the relative effects of the different programme features a non-randomised component, controlling for confounding factors, was used. In both cases a pre- and post-test design was used to assess change over time. We had one pre-test (i.e., wave 1, before the YEP) and three post-tests (after the YEP), which allowed us to test the immediate and longer-term outcomes depicted in Cluster 4 of the theory of change diagram (see Figures 1 and 2). The two components were complemented by qualitative, in-depth interviews in order to understand the effects of the programmes in more depth.

<sup>5</sup> This organisation runs two YEPs that have different durations and skills focuses.



## 3.2. Research design: Non-randomised component

In order to assess the relative effects of different programme features on the employment outcomes of interest the non-randomised pre- and post-test design was used. As previously described, young people could not be randomly assigned to the programmes, nor could a comparable control group be identified, against which to assess the YEP participants. In order to address these issues we engaged young people who had entered into the YEPs in the study and rigorously assessed a wide range of their personal, demographic and household level characteristics. This allowed us to control for as many observable confounding factors that might explain their differential selection into the programmes. We outline here the differences in the samples across the programmes.

#### Sample characteristics across the YEPs

Some distinct differences in participant characteristics are revealed in Table 2.

	Age	Male	Lives in a metro	Incomplete secondary	Degree	Prior work experience
Programme 1	25.2	27%	90%	5%	11%	53%
Programme 2	27.3	38%	87%	2%	5%	56%
Programme 3	25.3	25%	55%	15%	4%	66%
Programme 4	24.9	45%	97%	1%	4%	51%
Programme 5	24.5	34%	34%	4%	6%	40%
Programme 6	26.7	37%	1%	19%	1%	49%
Programme 7	25.0	43%	87%	4%	0	78%
Programme 8	26.3	81%	88%	31%	8%	50%
Total	25.6	35%	49%	9%	5%	49%

#### Table 2: Demographic characteristics by organisation, baseline

Table 2 shows that in terms of demographics, while the average age in the full sample was 25.6 at baseline, this masks considerable variation at the level of the YEPs: Programme 2 participants were the eldest on average, while Programme 4 and 5's participants were the youngest. Similar differences existed on the other variables in the table. Most programmes have a distinct slant towards female participants, except for Programme 4 which had a closer gender balance and Programme 8, which had far more male participants. Programme 6 participants had the lowest education levels, because the organisers allowed those without a matric to participate. Programme 1 on the other hand had the most educated youth. Almost 80% of participants in Programme 5.

Assessing their household socio-economic status (SES) at baseline reveals further differences as is shown in Table 3, which presents the average principal component (PC) scores per organisation for socioeconomic status and food insecurity. Lower scores on both PCs reveal poorer SES and lower food insecurity respectively<sup>6</sup>.

Table 3: Mean	SES	characteristics	bv	organisation, baseline	
	950	characteristics	Ny	organisation, basenne	

	SES (energy source and assets)	Food Insecurity
1. Programme 1	0.33	0.24
2. Programme 2	0.87	-0.26
3. Programme 3	-0.62	-0.01
4. Programme 4	1.31	-0.72
5. Programme 5	-0.17	-0.07
6. Programme 6	-0.66	0.26
7. Programme 7	0.56	1.47
8. Programme 8	-1.57	0.33

Although the programmes all target young people from poor socioeconomic backgrounds, and by and large do attract such participants, there are some variations in the household socioeconomic status at baseline across the programmes. The table shows that, on average, Programme 2 and Programme 4 participants came from relatively better-off households, while the opposite was true for participants from Programme 3 and 6. Programme 7 participants faced the highest levels of food insecurity while Programme 4 participants had the lowest levels.

<sup>&</sup>lt;sup>6</sup> Further discussion and explanation of the PCA is provided in section 3.7.

We also assessed differences in psychosocial characteristics at baseline across the programmes, which is shown in Table 4. Lower Job readiness PC scores reveal less confidence in their readiness for work, and higher risk tolerance PC scores reveal a greater propensity to take risks. The future outlook average is measured on a scale for which 4 is the maximum score and self-efficacy on a scale for which five is the maximum score.

	Job readiness	Future outlook scale mean	Self-efficacy scale mean	Risk tolerance
1. Programme 1	0.001	2.919	4.257	-0.135
2. Programme 2	0.743	2.848	4.355	-0.158
3. Programme 3	-0.089	2.880	4.156	-0.213
4. Programme 4	0.439	2.935	4.300	0.353
5. Programme 5	-0.071	2.935	4.200	-0.291
6. Programme 6	-0.534	2.888	4.147	-0.045
7. Programme 7	-0.199	2.877	4.255	0.113
8. Programme 8	-1.641	2.853	4.000	0.064
Total	-0.087	2.904	4.216	-0.124

Programme 2 followed by Programme 4 participants perceived themselves to be the most job-ready at baseline. These programme participants also had high perceived self-efficacy. Recruits at Programme 8, on the other hand, did not perceive themselves as particularly well-equipped for the labour market on average; nor did they perceive themselves to be as self-efficacious as youth at other YEPs.

The above data therefore show significant evidence of differential selection into the different programmes. If these factors are not controlled for, it is impossible to know whether differences in employment that are observed between participants at different YEPs is due to participation in a specific YEP, or to average differences in these confounding factors (Athey & Imbens, 2017). Random assignment could theoretically have been used to ensure confounding factors are not systematically correlated to programme participation. But as explained previously, this procedure was not feasible from a practical point of view. The alternative approach to tackling the selection problem, given observational, non-randomised data, is to develop a list of potential confounds, measure these factors as far as possible, and then comprehensively control for them in regression analyses (ibid). This is the approach followed here to assess the relative impacts of different programme features.

### 3.3. Research design: Experimental component

In the experimental component of the study, used to assess the impact of the financial capability intervention, we employed a cluster randomised, experimental design. A cluster randomised controlled trial (RCT) design was used to allocate different training sites to receive the financial capability intervention. An RCT involves randomly assigning study units (individuals or sub-groups) into different groups: one (or more) groups receiving an intervention or 'treatment', and another group that does not receive this intervention, that is the control group (in this case those who enrolled in YEPs but did not receive financial capability as well). With selection bias, relative changes in an outcome in the two groups are less a reflection of the intervention, and more of pre-treatment differences between the study participants in different groups. Randomisation is expected to alleviate selection bias. In the Siyakha study, randomisation was done at the site level, with half the training sites randomly allocated to the treatment group (sites where financial literacy classes were taught and savings products offered in addition to normal employability programming), and the other half to the control group (which did not receive the financial capability intervention, but employability training continued as normal).

For both the non-randomised and experimental components, changes over time were assessed. The pre- and post-test design is shown in Figure 3.



Figure 3: Diagram of pre- and post-test design

#### Site level randomisation and treatment implementation

In the study randomisation was done at the cluster level, that is, we assigned clusters (instead of individuals) to either treatment or control conditions. In the Siyakha study, the clusters (of which there were forty-six in total) were the training sites of each implementing partner organisation. Twenty-two sites were randomly assigned to the treatment condition, and twenty-four sites were randomly assigned to the control condition. For logistical reasons two of the sites were later dropped from the analysis<sup>7</sup>. A trainer from each treatment site was trained on the financial capability curriculum during a one-week training session. Each treatment site was provided with the financial capability module materials and SBSA was present to open savings accounts at these sites. Control sites were not provided with any of the above and treatment site trainers were advised not to divulge information to their colleagues working at control sites (most had limited if any contact with trainers at other sites).

We relied on randomisation at the cluster (site) level for three reasons. First, the intervention in Siyakha was inherently group-based and delivered in a classroom-like setting at each training site. Second, it was not practical to isolate each youth within a site to receive a different intervention, because resentful demoralization or diffusion (cross-contamination) of treatment might result. In other words, in the Siyakha case, concern for the scientific integrity of the study became an issue if cluster randomisation was not used. Third, youth within the same training site might no longer be independent of each other because they were exposed to common influences at the training site level, in addition to the intervention. For example, youth within the same site interacted with each other in and outside the classroom, had the same trainer, and had received treatment at the same time of the day (e.g., training sessions were conducted at the same time for all participants from the same training site). These interdependencies may contribute to violation of the statistical assumption that observations are independent of one another which would limit our ability to attribute changes to the treatment, that is, an intervention that only one of the groups receives (Shadish, Cook & Campbell, 2002; Raudenbush & Bryk, 2002). Randomisation at the site level addresses these concerns.

We also had to ensure that randomisation took into consideration the different offerings that each programme made. Within each programme, at each site we monitored at least two training sessions – one human capabilities session and one technical skills session. We are therefore fairly confident that the programme offering was the same (i.e. same type of skills, length, curriculum etc.) and that the main difference between treatment and control sites within each programme was the delivery of the financial capability intervention. For this reason, we had to first differentiate sites by programme and then ensure that there was an even spread of treatment and control sites within each programme. For instance, we grouped all Programme 5 training sites together and then randomly assigned Programme 5 training sites into either a treatment or control condition. This procedure ensured that there was an even spread of treatment and control groups for each organisation, allowing us to control for programme differences in the assessment of treatment and control outcomes.

Table 5 demonstrates the site level characteristics of the sample. It shows that there were two more control sites than treatment sites but that treatment sites had on average, nine more participants than control sites. Most of the sites were located in metropolitan areas (made up of metropolitan municipalities and surrounding or peripheral urban areas) as opposed to non-metropolitan areas such as small towns and rural areas. This arrangement is in part a reflection of an urban bias in employment (some programmes specifically target areas where participants are more likely to find work). However, it should also be noted that over two-thirds of youth reside in urban areas (Statistics South Africa, 2016), which might also explain the reasons why the programmes operate predominantly in urban areas. There is also an urban bias in where programmes choose to be located and which populations they choose to target.

	n			Geographic location of sites		
		participants per site	metro	non-metro		
Control	23	38.6	18	5		
Treatment	21	49.4	16	5		
Total	44	43.5	34	10		

#### Table 5: Site level characteristics of the sample by treatment/control

<sup>&</sup>lt;sup>7</sup> During a site visit, we found that one of the control sites was implementing the financial capability intervention, and this site was subsequently dropped from analyses. A treatment site was also dropped, due to miscommunications between the research team and the site management regarding the timelines of the programme at that site (and hence when data collection should take place).

## 3.4. Sampling strategy within sites

At each cluster or training site, we randomly selected youth to participate in the study by using the programme enrolment list. That is, fieldwork supervisors received the list of programme participants and a random number grid, they used the random numbers generated to select participants from the list.

Randomisation of youth within each cluster ensured that each participant had an equal chance of participating. The average number of youth per site was 43.5. The lowest number of youth participants per site was 9 at a Programme 8 site. The highest number of youth participants per site was 93. These differences are the result of the different training programme types and methodologies with Programme 8 training welders in a small workshop setting and Programme 5 and 6 bringing together relatively large numbers of young people at particular points during the programme for face-to-face training.

In Table 6 we include a range of observed individual-level variables at baseline to determine the success of the randomisation. Significant differences in the averages and proportions for each group are denoted with (p<0.1); \*\* (p<0.05) or \*\*\* (p<0.01).

	Control	Treatment
Age***	23.6 years	23 years
Male	38%	39%
Site in a metro***	71%	60%
Incomplete secondary*	9%	6%
Degree	6%	8%
Work experience prior to wave 1	51%	51%
Eastern Cape*	7%	5%
Free State***	0%	15%
Gauteng	40%	40%
KZN***	28%	9%
Limpopo	6%	7%
Mpumalanga***	8%	0%
North West***	7%	14%
Western Cape***	4%	11%
Household socio-economic status Principal Component (PC) <sup>10</sup>	0.02	0.06
Food Insecurity (PC)	0.04	-0.02
Job readiness (PC)**	0.13	-0.16
Future outlook at wave 1	2.91	2.9
Self-efficacy at wave 1	4.22	4.18
Risk tolerance (PC)**	-0.08	0.06
Household income	R2611.58	R2590.31

#### Table 6: Results of randomisation test<sup>8</sup>

Treatment participants are slightly younger, less likely to have been trained in a metro, perceive themselves as less job-ready at wave 1, and are more risk-tolerant. There is also variation between treatment and control at the provincial level. These individual and geographic variables are thus included in regression analyses to control for their potentially confounding influence on the effect of financial capability when estimating employment.

<sup>&</sup>lt;sup>8</sup> Variables were selected for the randomisation test based on an analysis of (a) dimensions along which treatment and control participants could plausibly differ, and (b) which of these dimensions could plausibly relate to employment.

<sup>&</sup>lt;sup>9</sup> Household socioeconomic status, food insecurity, job readiness and risk tolerance scores in this table were each derived using principal component analysis: a technique that effectively summarises the information contained in many raw variables. A full description is provided in section 3.7.

## 3.5. Overview of survey sample

The total number of youth interviewed at baseline (wave 1) across the sites was 1,974.

Implementing partner	Total n w1
Programme 1	283
Programme 2	286
Programme 3	71
Programme 4	180
Programme 5	732
Programme 6	320
Programme 7	62
Programme 8	40
Total	1,974

Table 7: Sample by programme

Attrition in the Siyakha study from baseline to waves 3 and 4 was substantial. Using wave four data only would yield a sample roughly 50% the size of the baseline sample. Difficulties with contacting the participants once they had left the programmes resulted from 1) numbers provided by participants at wave 1 and 2 being either incorrect or having changed (despite in most cases having obtained three numbers)<sup>10</sup>; 2) survey fatigue – many youth indicated an unwillingness, either due to lack of interest or to not having the time, to continue to participate in the research; and 3) the fact that this group of people is highly mobile and difficult to track down. In order to maximise the potential sample size, data from waves 3 and 4 were pooled. Pooling the two waves resulted in an effective sample size of 1,318 individuals, implying a re-interview rate of 67%. To account for the fact that some people were interviewed at both waves 3 and 4, and the dependence of their outcomes at the two time points (someone employed, or with high earnings at wave 3, is probably more likely to also be employed or have higher earnings at wave 4 than a different randomly sampled individual), lagged outcome variables are included in all regression modelling.

#### Nature of attrition

Given the high attrition rate over the duration of the study, the nature of the attriting sample as compared to the re-interviewed sample needed to be understood. Simple comparisons of means were conducted to establish the variables along which the study dropouts differed from those successfully re-interviewed at wave 3 or 4, with these variables used as additional controls in subsequent regression analyses. The comparison is presented in Table 8, with two-tailed t-tests conducted to assess significance of these differences (\*: p<0.1; \*\*: p<0.05; \*\*\* p<0.01):

	Pooled sample	Attrited sample	
Age	23.4	23.1	
Male**	37%	42%	
Trained at a metro site***	64%	71%	
Incomplete secondary	8%	7%	
Degree or higher*	6%	8%	
Work experience prior to wave 1	51%	52%	
Household SES (PC)***	-0.1	0.2	
Food Insecurity (PC)	0.04	-0.08	
Job readiness (PC)	-0.043	0.086	
Future outlook scale mean	2.902	2.91	
Self-efficacy scale mean	4.202	4.198	
Risk tolerance (PC)***	-0.091	0.183	

Table 8: Mean characteristics of re-interviewed (pooled) sample vs attrited sample<sup>11</sup>

<sup>&</sup>lt;sup>10</sup> Anecdotally we are aware that many youth 'cycle' between sim cards to take advantage of better network deals.

 $<sup>^{\</sup>rm II}$  Variable selection for this test followed the strategy identified for the randomization test – (a) identify which variables could determine dropout, and (b) which of those could plausibly relate to employment.

The attrited sample is significantly more likely to contain men, as well as youth who are better educated, trained at a site in a metropolitan area, with a better socio-economic status and a higher risk tolerance. All of these are conceivably associated with better employment probability. This finding implies that estimates of employment may be biased downwards and that employment rates might conceivably be higher had the dropouts been successfully re-interviewed. Controlling for these factors in regression analyses thus becomes important to alleviate this potential bias.

## 3.6. Survey instrument and data collection

Data were collected using a questionnaire completed by participants; monitoring questionnaires completed by participants, the trainers and an independent observer; administrative records (such as curriculum materials); and financial transaction data received from SBSA. Details about each of these are provided below.

#### Data collection

Survey data were collected from participants as they entered the programme (within one week of commencing the programme for longer-term programmes and within two days of commencing the programme for shorter-term programmes). Data collection was conducted on site using facilitated self-completion of questionnaires in which participants completed the questionnaires under the guidance of trained fieldworkers. The survey took approximately one hour to complete.

The survey was repeated as they exited the programme. While the aim was to collect these data on site as for the baseline assessment, this procedure was not always possible given programme logistics, leaving us to collect some wave 2 data telephonically. We used telephone follow-ups for the next two data collection points as well, one-year post-completion on average for wave 3, and two years' post-completion on average for wave 4. By these points in time participants had dispersed from their training sites across the country and telephonic follow-ups were the only feasible data collection method.

Trained fieldwork supervisors were deployed to each site to conduct the random selection of participants, to oversee the smooth roll-out of the survey process, and to conduct a quality check on the questionnaires. Once questionnaires were completed they were delivered to CSDA offices for a further round of checking before being delivered to data capturers. Telephonic questionnaires were completed in English using Mobenzi and therefore directly captured as the structured interview was taking place.

#### Questionnaire

Survey data included items measuring the following constructs: (a) youth demographics and family characteristics, (b) income and asset ownership, (c) financial capability, (d) household food security, (e) psychosocial indicators (such as self-efficacy, self-esteem, and future orientation), (f) employment, earnings, and job characteristics, (g) knowledge acquisition and skills development, (h) job-related and entrepreneurial attitudes, (i) education and training, (j) social connection, and (k) health perceptions and behaviours. The same survey instrument was used at all four waves, with additions at waves 3 and 4 to address job quality besides earnings, hours and the existence of a contract (such as the worker's beliefs about the possibilities for career advancement, and whether the worker had received additional responsibilities since starting the job). The employment section, regarded as the most important, was also moved up to the beginning of the survey at waves 3 and 4 to guard against survey fatigue and the possibility of not getting this information.

The questionnaire sections were decided upon based on the conceptual model discussed above. For each section the research team first attempted to identify suitable standardised scales and question sets. The advantage of using such scales is that they enhance the validity of the instrument. Where such scales were not available questions were developed by the research team. The full questionnaire was then reviewed by experts from key fields of study and their feedback was incorporated into the questionnaire.

The instrument was then piloted twice. In the first instance we completed the questionnaire with ten participants of the loveLife groundBREAKERS programme and the Afrika Tikkun Career Readiness programme (from the cohorts that preceded the study cohort) and followed the questionnaire completion with cognitive interviews. The primary purpose of this piloting phase was to assess whether participants understood the questions in the same way that they were intended to be understood, and to assess how they responded to seemingly sensitive questions (such as sexual and reproductive health questions). By and large the questions were understood as intended and the participants were surprisingly open about the potentially sensitive questions. Where there was confusion the questions were amended to enhance clarity.

The instrument was piloted a second time with a group of fieldworkers (also young people) in order to test the skip patterns and how long it would take to complete the questionnaire. Final editorial changes were made to the questionnaire and notes were made about vernacular words that could be used if participants did not understand particular English words.

The rigour of the research instruments was enhanced with the use of previously tested and standardised questions and standard response options (such as the Likert scale). In addition, cognitive interviewing in the piloting phase ensured that questions were being understood as intended. Significant investments in training of fieldworkers, the use of experienced fieldworkers, a standardised research instrument, and standardised training all contributed to the rigour of the data collection.

#### Monitoring data

At each site we monitored at least two training sessions – one human capabilities session and one technical skills session. At the treatment sites we also monitored one financial capability session. We received training schedules from the programmes and randomly selected one of each type of training session to monitor. In certain instances, the research team was not informed of changes to the training roll-out plan, meaning that we may have monitored two human capabilities sessions and no technical skills sessions.

At each monitoring session an independent observer observed the session and completed a questionnaire. The trainer was asked to self-evaluate the session, and 3-4 willing participants were asked to complete a short evaluation of the session.

#### 3.7. Survey data analysis

In the analysis we were primarily interested in understanding the cluster 4 outcomes (as discussed in Figure 1 and 2). We therefore began by engaging in descriptive and bivariate analysis of the employment, unemployment, and education outcomes for the pooled sample.

One way of evaluating the potential impact of YEPs is to compare outcomes for Siyakha participants with those for similar people in another dataset. Multiple waves of the QLFS, chosen to coincide with the Siyakha data collection period, were used as the comparison dataset. Race, sex, education, age, and lagged employment<sup>12</sup> variables were standardised across the two datasets before appending the QLFS to the Siyakha data and creating a dummy variable indicating whether observations come from the Siyakha data or not. Neither a simple comparison of employment rates by the two levels of this variable (i.e., the two sub-samples), nor a regression of employment on this variable, would be sufficient to yield an estimate of the benefit (or lack thereof) of participating in a YEP. This is because we know that Siyakha sample members are different along known observable dimensions, like education level. The QLFS was therefore weighted on these observable characteristics (age, age squared, sex, education dummies and lagged employment, as well as province and year-quarter information) to more closely resemble the Siyakha data. This weighting was achieved via probit regression.

An ordinary linear regression of employment on the Siyakha dummy was then run on the *weighted* data to estimate the gains from YEP participation<sup>13</sup>.

## Analysis to assess treatment effects and effects of different programme features

We then assessed what programme features affect these outcomes, and the extent to which having received the treatment – treated here as another programme feature, albeit one that has been randomised – plays a role. We did this assessment by using regression analysis and testing various models in which the variables along which differential selection occurred were controlled for (as discussed in section 3.2. above). In other words, various difficult-to-observe individual and household attributes that are usually omitted from survey instruments – such as self-efficacy, future orientation, household food security, asset ownership, and risk tolerance – were measured in the Siyakha data. The potentially confounding effects of these features on selection into different programmes (including financial capability) are controlled for in the regression analyses. Further robustness checks were also run on the employment regressions<sup>14</sup>.

These control variables are divided into demographic, socio-economic and psychosocial subsets. Some of these controls were derived using Principal Component Analysis (PCA) (James et al., 2013). This method takes a large number of variables and creates indices that combine related variables into single constructs,

<sup>&</sup>lt;sup>12</sup> However, the lagged employment variable should be treated with caution because the QLFS panel is conducted on a quarterly basis (three-monthly), while the length of time between waves 3 and 4 is a year on average (with variation).

<sup>&</sup>lt;sup>13</sup> The regression used heteroskedasticity-robust standard errors clustered at the individual level to account for the interdependency of outcomes measured for the same individual at different points in time.

<sup>&</sup>lt;sup>14</sup> These robustness checks involved (a) running regressions using wave 1 site location (province and metro) variables instead of current location (wave 3 and 4) variables; (b) running regressions using only wave 3 and only wave 4 data, respectively; (c) including self-employment in the employment outcome used in regression; (d) using standard errors clustered at the individual, rather than the site level in regression; (e) regression controls that were derived using principal component analysis were replaced with their closest raw variables; (f) 'placebo tests' of the preferred regression model on alternate, wave 1 labour market outcomes, as per the approach recommended by Athey & Imbens (2017); (g) using logistic regression instead of ordinary least squares regression; (h) running a double lasso regression to assess variable selection and to test the assumption of unconfoundedness, as per Mullainathan & Spies (2017) and Belloni, Chernozhukov & Hansen (2014); and finally, (i) after running both regression these and Blinders (2017) and secompositions (detailed in the next sub-section), a series of final regressions that included estimation of interaction effects were run to assess the robustness of the interactions. These final regressions also included alternate programme features (found to have coefficients that were not statistically significant): the provision of stipends, programme accreditation, and work experience training.

or principal components, that capture the variation in the data. This is a useful method, given that there are far too many raw variables to feasibly incorporate into regression analysis. In addition, we expect that many variables are imperfectly measured realisations of the same underlying characteristics. For example, ownership of more than 30 different assets among households and individuals measured by the survey, as well as living conditions (such as types of materials used in housing; and sources of energy for different uses) could all be said to measure socioeconomic status (SES). The PCA identifies which of these variables carry the greatest weight in the aggregated SES constructs – i.e. each PC. The first PC of SES primarily reflects ownership of consumer electronics and the use of electricity for lighting and cooking, while the first principal component for food insecurity.

For psychosocial factors, the 'risk tolerance' principle component is heavily weighted by alcohol and tobacco consumption (as opposed to other risk-related questions measured in the survey such as sexual behaviour and drug abuse). The job-readiness principal component contains summary information for job application and interviewing skills. Each of the PCAs (household socioeconomic status, food insecurity, job readiness and risk tolerance) was done using baseline/wave 1 data.

Other psychosocial controls are self-efficacy and future orientation at wave 1, assessed at each wave using established scales. Future orientation involves the ability to set or develop goals for one's life and the ability to pursue these goals (Lee et al., 2010) and is measured on an 11-item question and a 4-point Likert scale. Respondents could receive a high score of 44 in the future orientation scale if they scored positively (4) on each of the 11 items. Self-efficacy is the belief that we can achieve a goal as a result of our own actions (Baron & Branscombe, 2011). It is measured using a 5-point Likert scale with 8 items in which respondents could score a maximum of 40. Both variables were used as continuous variables in the regression models. Demographic controls are work experience prior to wave 1, race, geographic location (by province and metro - i.e. whether the respondent lives in one of South Africa's eight metropolitan areas or not), age and age squared (to allow for the possibility that for the very young, with limited work experience, and for the older youth, who may have experienced chronic unemployment for a long time, the odds of employment are low), and educational attainment. Every control has the potential to influence employment in either direction. These controls were also selected because we know, based on the sampling discussion above, that these are dimensions along which significant selection into different programmes occurs. Controlling for them therefore improves the ability to derive estimates of programme effects that are not confounded by demographic, psychosocial and socio-economic factors that determine enrolment into different programmes. They also control for differences between treatment and control participants, and between dropouts and those who were successfully reinterviewed at either wave 3 or 4.

In all models, a lagged employment variable was included as a final control. This procedure controls for the serial dependence in the data that arises from the pooling of individuals observed at both waves 3 and 4 (someone employed at wave 3 is more likely to be employed at wave 4 than a different, randomly sampled individual).

Finally, we used heteroscedasticity-robust standard errors clustered at the site level, using the unique identifier for each site as the clustering variable. This was to account for the fact that individuals in this sample are trained at sites, where site-specific factors – such as teacher quality, the level of adherence to the YEP curriculum, or the levels of support participants provide to each other – could influence employment probability in the same way for people at the same site, inducing correlation in standard errors. Youth were also clustered within organisations and within provinces. The clustering of different youth in different organisations was accounted for via the analysis of differences in observable characteristics as outlined in Tables 2 and 3 above, with variables along which significant variables were discerned included in regression analyses. Province is also included as a variable in regression analyses, to account for different socio-economic conditions in different parts of the country and their potential influence on labour market outcomes for individuals.

#### Programme feature interaction effects analysis

In our study, no one programme feature operated independently of the others. For instance, the treatment was rolled out at training sites where existing programming continued with the *addition* of the financial capability intervention. It therefore stands to reason that there could be interactions between different programme features. To understand these interactions, we used a regression tree. A regression tree is a tool that uses the Chi-square Automatic Interaction Detector (CHAID) algorithm to split a dataset into a number of distinct regions based on the values of a set of predictors, and how they explain an outcome (James et al., 2013). We set up the algorithm using the preferred specification used to model employment as described in the preceding sub-section, which included programme features as variables of interest while controlling for demographic differences, socio-economic status and psychosocial factors. Using recursive binary splitting, at each point at which the tree branches, the CHAID algorithm in Stata decides which one of the set of predictors best explains variation in the outcome. In this way, the sample is divided into different regions with different predicted values for employment, based on different and distinct combinations of predictors. These combinations effectively reveal interactions.

## Analysis to understand which programme features work for which groups of youth

We were also interested in understanding whether different programme features were more or less important for different groups of young people. From a policy point of view, particular programme features may be more important for youth located in rural areas while another programme feature may be more important in an urban area. To assess these complexities, we needed to analyse interaction effects of programme features with the control variables. Blinder-Oaxaca decompositions were used to identify such effects.

The Blinder-Oaxaca decomposition technique (Jann, 2008) is a regression-based method. It works by calculating the difference in the mean of an outcome, such as the mean employment rate, between two groups, such as men and women. It then seeks to identify which variables systematically vary – or interact – with sex in determining employment. For each predictor, this interactive effect is decomposed into two parts. The first part of the effect is identified as the effect of the two groups having different *levels* or *mean amounts* of the predictor in question. This level is labelled variance that is *explained* by the predictor. The second part is *unexplained* by differences in endowments which means that even where the two groups have the same amount of a certain variable, this variable has different *effects* in the two groups. This effect is equivalent to the coefficient on the predictor being more advantageous in one group than in the other; to one group having a steeper regression line.

In the context of YEPs, it is conceivable that different types of training may work differently for different groups of young people. Young women for example may face different barriers in the labour market than young men that make some types of interventions less effective than others. However, even if young men and women go through the same type of intervention, unmeasured factors, such as care responsibilities, may dampen the positive effect of that intervention in stimulating employment. Inequalities in employment outcomes may thus be driven by differences in endowments (X), and in the effects of those endowments ( $\beta$ ).

### 3.8. Qualitative component

The purpose of the qualitative component was to develop in-depth understanding from the participants about what they attribute the changes in their lives to and what (if any) role they feel the YEP played in their labour market experiences. It was intended to complement the findings of the non-randomised and experimental components.

#### Sampling

We engaged in a quota sampling strategy as we wanted to engage the views of young people from all of the different programmes and of participants who, at the wave 3 follow up point, were in different phases of their labour market engagement (employed, unemployed, studying further). We also sought an even gender split and, where possible, some representivity across urban and rural sites. There were a few organisations where we were unable to identify at least one male and female who neatly fitted into our quota method. There was some variation in location, usually dependent on the sites where programmes ran their programmes. Programme sites were not an indicator of where the participant would be living at the time of the interview at wave 3 – the dataset used to implement the quota sampling strategy.

From the wave 3 survey dataset we grouped the participants according to the abovementioned criteria and then randomly selected representatives of each of these groups to be approached for in-depth interviews. Where participants declined a second or third survey participant was randomly selected and approached.

#### Sample overview

Table 9 shows how many participants we were able to interview at each organisation.

	Total IDIs (n)	Sex		Status at interview		
		Male	Female	Employed	Unemployed	Further education
Programme 1	6	3	3	2	2	2
Programme 2	6	3	3	2	2	2
Programme 3	7	3	4	3	2	2
Programme 4	7	4	3	2	3	2
Programme 5	6	3	3	2	2	2
Programme 6	6	3	3	2	2	2
Programme 7	4	2	2	1	2	1
Programme 8	5	3	2	2	1	2
TOTAL	47	24	23	16	16	15

#### Table 9: Sample overview for qualitative interviews (n=47)

#### Data collection and analysis

In-depth interviews (IDIs) were conducted four to six months following the wave 3 data collection by trained interviewers in the language of the participants' choice and at a mutually agreeable venue, usually conveniently located in the area where the participant lived. Interviews were audio recorded upon securing permission from the participant, and were transcribed and translated into English.

The data was analysed thematically using Atlas ti<sup>®</sup> by three of the research team. An initial coding list was developed from the interview schedule, using an inductive approach, i.e. the codes were generated from analysing two transcripts each. The code list was refined and then used to code the remaining transcripts. Insights from these analyses are presented at various points in text where they shed light on an aspect of the statistical analyses. They are also used to frame the final section of this report (before the conclusions) which explores young people's experiences and perceptions of YEPs, and whether and in what ways they are deemed useful.

#### 3.9. Ethics

Ethical approval for the study was received from both the University of Johannesburg's Faculty of Humanities Ethics Committee as well as the University of North Carolina Chapel-Hill's Independent Review Board. All participants were provided with detailed information about the study purpose, what would be required of them, their rights to privacy and confidentiality, and potential risks and benefits in an informed consent letter which they were required to sign if they volunteered to participate. The informed consent form was available to them to read but was also explained in full by fieldworkers before data collection commenced. Finally, the informed consent explicitly stated that refusal to participate in the survey would not influence their participation in the YEP they were enrolled at in any way, and that they could withdraw their consent at any point in the interview.

At each point in the data collection process, informed consent was renegotiated, with participants provided with the opportunity to opt out of the study at each point. At each point they also provided consent to be contacted for follow-up interviews.

All quantitative data were fully anonymised. Each participant was assigned a unique identifier in order to connect each subsequent data point (required to append later datasets to the baseline dataset) but all identifying information was removed from the dataset that was made available for analysis by the research team members. For the qualitative data, the participants' identifying information was also removed and the data are reported using pseudonyms.

No incentives were provided to participants to participate but for each round of data collection a bursary that could cover a certificate level course was made available on a lottery basis for those who chose to participate. In each round once the bursary was allocated, the successful individual was removed from the dataset given that the bursary would have confounded the results for that participant. The bursary money was paid over to the institution at which they chose to study.

## 4. FINDINGS

The primary outcome of interest for us at waves 3 and 4 was whether participants were employed. Further, for those employed, we sought to understand the nature of their work and whether or not there had been any progression in the nature and type of work. We asked those who had prior work experience at wave 1 about their most important job and we compared that data to the kinds of jobs they were in by wave 4, with a specific focus on whether or not their job was governed by a contract and what their earnings were (to see if there had been a progression in earnings). For those who were unemployed at wave 3 or 4, we assessed their work-search behaviour and resilience as well as the duration of unemployment as compared to what was reported prior to their entry into the programmes. Finally, we were keen to understand which of the participants had gone on to study further and whether that behaviour represented a progression towards the labour market or not.

For most descriptive analyses, we limit the sample to the latest wave of data collection – that is, wave 4. For inferential analyses (that is, the linear regressions, the regression tree, and the Blinder-Oaxaca decompositions), we use the larger, pooled sample, containing observations for participants at wave 3 and/or wave 4.

#### 4.1. Employment

At the fourth and final wave of data collection, 28.5% (n=278) of participants in the Siyakha sample reported that they were currently working i.e. in a paid position of regular (full-time or part-time) work. A further 4.5% (n=44) of the participants reported that they were working for themselves at wave 4. We do see a steady progression in terms of entry into employment over time as is shown in Table 10.
### Table 10: Employment by wave

	Wave 1	Wave 3	Wave 4
Unemployed	82.67%	74.01%	71.55%
Employed	11.38%	25.99%	28.45%
Total	1800	758	977

At wave 1 - the point of entry to one of the eight YEPs in the Siyakha data - 11% of the sample were employed<sup>15</sup>. Of the remaining 89% who were unemployed at wave 1, just under three-quarters had been unemployed for over a year. At wave 3 (around a year after YEP exit), 26% are employed, rising to 28% at wave 4. Kluve et al. (2019) find that employment effects of ALMPs in the short-term are minimal but are larger when observed over time. Our data seems to confirm this trend.

When the YEP participant sample is compared to the weighted and matched QLFS sample (as described in section 3 above), we estimate that Siyakha participants are 11% more likely to be in paid employment than similar people in the QLFS, a highly significant result. This cannot however be interpreted as a causal impact of YEP participation, given that we cannot control for a range of socioeconomic and psychosocial factors in the QLFS that may also determine employment outcomes. We also cannot determine from the QLFS exactly how many, if any, of the youth in that sample had gone through a YEP similar to one of the eight that are the focus of the Siyakha study. Nonetheless, 11% could be interpreted as an 'upper bound' estimate of the effectiveness of the YEPs, which would likely be reduced after accounting for selection into training, unobserved background variables, and differences in how individuals respond to training. The YEPs therefore seem to make some contribution to improving the participants' labour market outcomes, although the exact extent of this cannot be tested.

Table 11 shows the effects of the treatment on employment at wave 4. Those participants who received a financial intervention, i.e. treatment group, were significantly more likely to be in employment when compared to those in the control group (p<0.05).

	Employed (%)	Unemployed (%)	Total
Treatment	31.5%	68.5%	515
Control	24.6%	75.4%	423
TOTAL	266	672	938

#### Table 11: Employment status at wave 4 by treatment/control

This finding suggests that a financial capability input does have a positive effect on employment when combined with a YEP. This finding is tested further in the multiple regression analysis discussed in section 4.4.

### Nature of employment

At wave 4, the mean wage in the job was R4,862 per month after deductions with a median of R3,500 per month (n=256). This amount represents a progression towards higher paying work over time. The mean wage earned in the most important job the participants had held prior to joining the YEP was R2,233 per month (n=953); with a median of R1,800 per month<sup>16</sup>. As with the wave 1 data, the wages reported were generally for full-time work: 40.3 hours per week on average with a median of 40 hours per week.

There were no significant differences in earnings by age category, however we do see slight but significant differences by sex, with males earning more than females. We also see that living in a metro area significantly increases earnings when compared to those living outside metro areas as might be expected.

We also asked participants how they found out about the jobs they were in. Over a quarter (26.3%) learned about the job through a friend or relative in another household and another 9.4% asked someone who had employed them previously, which tells us that social networks remain an important factor in facilitating the search for employment opportunities. This group was followed by 15.5% who saw an advert in the newspapers or on the internet. A few participants (9.4%) reported seeing job adverts on notice boards in community or shopping centres.

<sup>&</sup>lt;sup>15</sup> This figure must be interpreted with caution and is not strictly comparable to the employment rates at waves 3 and 4. This is because at wave 1, some may have left employment to enrol in a YEP, or regarded themselves as unemployed because they were in or about to enrol in a YEP. Those referring to participation in the YEP as employment (see the section on the meaning of employment below for more details) were removed from this calculation.

<sup>&</sup>lt;sup>16</sup> Most of these jobs were held in 2014, which is between 3 and 4 years prior to wave 4. Assuming an average inflation rate of 5.4% per year, the wave 4 median wage of R3,500 would be equivalent to R2,963 in 2015, R2,836 in 2014, and R2,680 in 2013 (Crause, 2018). Based on this rough calculation, wage increases appear to be in excess of inflation.

Although the figures are not as reliable given the small number of participants engaged in self-employment, here too we observe progression in earnings for those engaged in self-employment. At wave 4, the average monthly take home pay for those in self-employment was just under R6,000, with a median of R2,500. This amount is up from the very low monthly average take-home earnings from self-employment of R1,989 (median R1,200) reported at wave 1. Of those who reported being self-employed, only 15 (36.4%) noted that their businesses were registered for income tax/VAT – an indicator we use to denote whether the business is formal or informal. The finding shows that the bulk of self-employment remains in the informal sector. Males were earning significantly more money in self-employment than females (p<0.05).

We also asked questions relating to whether there was a sense of progression in self-employment activities for those who were self-employed at wave 1 and wave 4. Over a third of participants (40.9%) (n=18) reported an improvement in the number of clients they had, while 34.1% (n=15) reported having fewer clients and 25% (n=11) reported having the same number of clients. When asked about improvement in their earnings since working for themselves, 48.2% (n=19) reported making more money from their business activity, 31.8% (n=14) reported making less money than when they started working for themselves and 25% (n=11) reported making the same amount.

### The meaning of employment for participants

Drawing on the qualitative data we gather insight into the multiple definitions of work for participants. Through speaking to the participants it was clear that there is considerable variation in what work means and when someone considers themselves as employed. According to some, anything that is done in exchange for money signifies employment. This activity includes attending a course or training where a stipend is paid. Conversely, some participants enrolled in these programmes were clear in saying that they are unemployed, even though they were receiving a stipend. They stated that they were in training, an internship, apprenticeship or learnership.

These differing views on what it means to be (un)employed are interesting for a number of reasons. Firstly, they indicate the difficulty in defining and measuring unemployment. Secondly, it tells us about the perceived meaning of work. For those participants receiving a stipend and considering themselves as employed, the most common view expressed was that anything done in exchange for money was considered as employment. Therefore, although the stipend was primarily to cover the costs of transport, these respondents viewed this money as a salary. This finding is not surprising given that some wages are so low that they just about only cover the cost of transport. For example, one respondent reported doing casual work for R120 per day. Given that some reported a stipend of R2,500 per month (R113,63p/d) it can be seen how the stipend and salary are viewed in a similar manner.

However, those who considered the youth employment programme as training, relayed that to be employed means more than just receiving money. To them employment indicates the potential for growth and progress. For those without any income, growth or learning was viewed as a luxury whereas a salary or any income was viewed as a necessity. In line with participants' understanding of the meaning of work, they reported a diversity of career goals. Of those who saw employment as an opportunity for growth, future goals included owning their own company, becoming a doctor or published author. Others were simply looking for a stable income that would allow them a sense of freedom and independence.

### 4.2. Unemployment

Although the progression in employment is encouraging, the majority of participants (71.5%) remained unemployed or returned to unemployment by wave 4. Respondents who were unemployed at the time of the final wave of data collection (n=662) reported that they had been unemployed for an average of 15 months (median=12 months). The majority of participants had therefore experienced chronic unemployment, i.e. they had been unemployed for 12 months or more, and the average period of unemployment had increased since wave 1 where the average reported duration of unemployment was 12.9 months. On average older youth were unemployed for 17 months, whereas younger youth were unemployed for 14 months on average. One of the main reasons we originally targeted younger youth, aged 18-25, was because we expected that intervening to support young people transition from school to work would prevent or reduce the severity of chronic unemployment. These results show us that the longer one is unemployed, the harder it is to get back into the labour market. As might be expected, geographic location plays an important role in determining chronic unemployment. Those who were not living in metro areas, where more job opportunities are concentrated, were significantly more likely to be unemployed for extended periods of time.

The qualitative data provide insights into the experience of unemployment and the psychosocial and psychological effects it has on young people. Asked what it means to be unemployed in the in-depth interviews with participants, many responded that it means being dependent on family and friends for food and accommodation, being unable to contribute to the household, and being a burden on their family or partner. In some cases, this situation leads to strained relationships in their household. One participant said that the consequence of unemployment is that you "depend on someone and every time (you need something) you have to beg...even for small things you have to ask (for money) all the time". Another said that as the first-born child his mother expects him to contribute to the household and as he is unable to do so she gets angry with him. In other instances, the family were understanding of the young person's situation. One participant

commented that her mother was always encouraging her, and that when she failed her degree her mother said "go back my child, it's not the end of the world". Another reflected that "you don't only need financial support but moral support from your family as well, motivation you know". He relayed how he used to speak to his dad about the youth employability programme and how his dad started supporting him, understanding what he wanted to achieve and understanding his passion. He relayed how his older brother would give him R20 for something to eat and how his mom "tries her best to give me something as well". This respondent indicated that his family are critical in helping him. These quotes indicate the important positive or negative role that family plays in unemployed peoples' lives.

Unemployment is commonly perceived as depressing, frustrating and stressful. Feeling angry, isolated and 'like a failure' were some of the experiences of unemployment. These feelings may worsen as the person grows older, and may be experienced more acutely by older siblings. One participant said that with no money you have "no life". Another said that if you are unemployed then "no-one even listens to you". Yet another said that if you are unemployed then "you are a nobody". In addition, some respondents noted that being unemployed they were bored, and often have to sit at home and "do nothing".

Most respondents who we interviewed were either looking for work, or open to working. Given the cost of looking for work, those who did not have any income relied on money from family and partners to fund their job search. Quotes indicating a common sentiment to work include "I'll take anything that I can get", "I'll take what comes" and "I'm not going to be choosey. I'll take whatever God gives me". These responses indicate the willingness of unemployed participants to accept a variety of jobs and points to the vulnerability of young people in the labour market.

### Perceived reasons for unemployment

The factors that shape unemployment of youth in South Africa are multiple and amply documented in a systematic overview of the drivers of youth unemployment (De Lannoy et al., 2018). By and large the factors are structural in nature with a variety of micro-level household barriers also shaping unemployment (including geographic location, limited income, and limited social networks). During the in-depth interviews, young people accurately identify many of the reasons for their experience of unemployment.

When they were asked the reasons why they had not been able to find a job, lack of money, insufficient qualifications and scarcity of jobs were the most common responses. A few respondents indicated that nepotism or the need to bribe someone was preventing them from finding work. One participant said that his father was thinking about paying someone to get him a job in a local mining company. He said that at this specific company the only way to get a job is when you "have connections and things like that". Less common reasons for unemployment were that it is God's will or that they are unlucky.

The cost of looking for work constrained and prohibited many unemployed respondents from actively looking for work. This difficulty was experienced more acutely by respondents who had to travel to the nearest town to apply for work and/or use the internet café. One person had commented that looking for work is expensive, and relayed how sometimes she would pay for transport into town and when she got to the internet café she would find that the internet was not working.

Lack of educational qualifications was another prominent perceived cause of unemployment. The importance of education is indicated in the following quote; "...without education you have to hustle to get there (employed) but with education you already have that key".

Sentiments such as, there are "no jobs", "no industry" "no opportunities" were commonly held among the unemployed. This viewpoint seemed more prevalent among those in rural areas although they were reported by a diversity of participants. A few people spoke about how they went to companies to submit their CV they were told that they were not accepting CVs as there were no jobs.

### Job search activity

Despite the experience of chronic unemployment, the participants displayed resilience and continued sending out job applications, remaining hopeful that they would find a job in the near future. At wave 4, a high proportion, namely 72.4% of the unemployed actively looked for work or tried to start a business during their time of unemployment. Treatment participants were more likely to have done so than control group participants. Participants were asked to specify what they had done in the 6 months that preceded the interview to look for work or start a business. Just under three-quarters (73.5%) had searched adverts and the internet, 36.7% placed or answered advertisements, 33.5% asked relatives/friends and 29.2% went directly to workplaces, farms and factories to enquire about vacancies.

For the 27% who had not looked for work during their period of unemployment, the main reason given was that they had decided to go back to school (42.1%) and because they had family responsibilities (6%). The former is an increase on the wave 1 findings, in which only 27% had indicated going back to study as a reason for not searching. Encouragingly nobody indicated being discouraged as a reason for not searching for work. This group was down from just over 27% in the wave 1 sample, suggesting that participating in a YEP may protect against discouragement. Worryingly, however, just over 8% indicated that they had not looked for work because they felt that they did not have the required skills, suggesting that they do not feel that the YEPs had imparted adequate skills for the labour market and that they felt the need to upskill further.

When asked whether or not they had applied for any jobs in the three months preceding the wave 4 interview, 63.6% (n=422) responded that they had. The mean number of jobs applied for was 10, with a median of 4 jobs. Participants were then asked about where they found out about these jobs. We see that the most popular source of information about jobs was through the internet (68%) (n=287), followed by 44% (n=186) who found out about jobs from family and friends outside of their household, newspapers (40%), notice boards in their communities (24.9%) and 23.5% who asked people in their household. It is interesting to note that participants report a far higher use of social networks (both within and outside of the household) to search for work. At wave 1 this approach was the least used strategy, yet in the South African labour market it is one of the most effective strategies. Social networks continue to play an important role in finding work and it is encouraging that the participants are turning to this potentially more effective strategy in the absence of formal intermediation and employment-support services that can link them to jobs.

Job applicants were optimistic. At wave 4– 62.8% considered their most recent job application a good one with a high chance of success; 32.5% saw this application as good but with a limited chance of success; while only 4.7% felt that it was not a good application. Of the 63.6% who reported applying for jobs, just under a quarter (24.3%) (n=161) attended an interview. A large majority (92.6%) of interviewees believed they had performed well in their most recent interview, suggesting continued confidence in the work-search process.

### Costs of work-seeking

The average monthly amount spent on transport for job seeking by the unemployed in the 3 months preceding wave 4 was R280, with a median of R100 (n=643). Overwhelmingly, these costs are covered via loans from household members (47% reported having used this source of funding). Family members outside the household were called on for help by 9% of respondents, and 6.2% indicated using their own savings. The largest non-transport job search costs are internet costs and printing fees. Other large cost categories include application fees. The mean total amount spent on these other search costs was R325 per month, with a median of R200 (n=291).

## 4.3. Further education and training

At wave 4, just under a fifth of remaining participants had gone on to enrol for further training (162 participants). Of these, a quarter had enrolled for a training programme similar to the one they had already completed (see the final two rows of Table 12). At wave 1 we noted that over half of participants had previously participated in similar training programmes. Those who had attended a previous programme indicated that they had attended on average two different training or skills development programmes before enrolling for the programme under assessment. This finding suggests that young people tend to participate in multiple skills training programmes before entering employment or further or higher education and confirms the notion of how transitions to the labour market are staggered (Isdale et al., 2016). It also points to the fact that there seems to be a great deal of churn in the youth employability training sector.



Much of this churn can be explained by the clear awareness that young people have of the importance of education in the labour market. The qualitative data demonstrate how, across the board, young people share this understanding and have high educational aspirations. As such, most had tried to upskill themselves and obtain further qualifications. This upskilling included upgrading their Grade 12 results, enrolling in short courses, or enrolling for diplomas and degree qualifications. Unfortunately, however, it was common for them to have dropped out of their studies due to financial constraints. Some of those who had obtained bursaries to study had lost their bursaries when they failed a subject. Others, such as those without a Grade 12 qualification or without the required Grade 12 marks, did not qualify for bursaries and were not able to afford the education fees required to enrol in educational courses. Few had however completed their course but had not graduated because of their outstanding student fees. In these cases, they had no certification to indicate their qualifications. Of those who had post-grade 12 qualifications, either they viewed these as insufficient qualifications or they indicated that they did not have the experience required to find work. Relating to education or 'upskilling', most participants seemed eager to learn and likely to take up any learning opportunity that they were offered, on condition that they could afford the expenses that this opportunity incurred, which were most commonly fees, accommodation and transport.

We can see how this activity translates into actual education progression in the quantitative data. It is encouraging that for many of those going on to study further there was some progression in that training. A fifth indicated taking up a certificate or diploma at a technical and vocational education and training college and just under a fifth were enrolled for a degree programme at university.

Nature of qualification in wave 4 as compared to wave 1	n	%
Higher level in progress	97	60%
Higher level completed	24	15%
Similar level in progress	28	17%
Similar level completed	13	8%
TOTAL	162	

Table 12: Progression in post-secondary education and training, wave 4 compared to wave 1

When we assess educational attainment and enrolment from wave 1 to wave 4 the table above shows that there is progression in terms of the level of qualification for the majority of those that went on to study further. Again, although this progression is not attributable to the programmes it does point to the potentially supportive role that YEPs play in the transition to work for young people.

### 4.4. What shapes employment outcomes?

Ordinary least squares (OLS) linear regression was used on the pooled wave 3 and 4 sample to estimate the effects of various programme features and control variables on employment in a linear probability model. Employment was measured as binary, that is yes or no. While there are drawbacks to using OLS on a binary outcome, OLS is generally easier to interpret than its nearest rival for this application, logistic regression, while remaining competitive in terms of prediction accuracy (James et al., 2013)<sup>17</sup>. For our purposes the outcome variable also excludes those who are self-employed, because we imagine entrepreneurship is driven by a different process.

The predictors of interest are different features of the YEPs. These included whether the programme included matching, the time spent on human capability skills, and programme duration. These features are included as major independent variables alongside whether participants were involved in the financial capability treatment or not. Other programme features (work experience, the extent of technical skills training, accreditation of training and the provision of stipends) were found to be uninformative in alternate models and dropped from the final model.

### Programme feature effects on employment

Table 13 shows the results of the regression analyses. Figures outside parentheses are the coefficients of the various independent variables, while those underneath them in parentheses are the robust standard errors clustered at the site level. The first column shows the results of a regression on employment that includes only the programme features of interest (matching, amount of time spent on human capability skills training and duration of the programme) and the effect of the treatment alongside the lagged employment variable (to control for the effect of a single respondent appearing in the pooled sample twice). No control variables are specified.

Here, going through a YEP that has job/employer matching as a central feature of programme design is associated with a 34 percentage point increase in the likelihood of finding work, relative to those who do not receive matching (column 1, row labelled 'matching'). Similarly, the more time spent on human capability

<sup>&</sup>lt;sup>17</sup> A robustness check was to run logistic regression instead. The pattern of results does not change.

skills training, the better the chances of employment (human capability skills time increases of one unit are associated with an 8% increase in employment probability). These are significant results (p<0.01). Going through the financial capability intervention is also associated with better employment (p<0.05), with an estimated coefficient (or loosely, effect) of 0.07, or 7% (column 1, row labelled 'trained at a treatment site'). Programme duration has a coefficient of approximately zero, and is not statistically significant.

	Employment, predicted by programme features only	Employment predicted by programme features controlling for demographic variables only	Employment predicted by programme features, controlling for demographic and household SES differences	Employment predicted by programme features, controlling for demographic, household SES and psychosocial factors
Martala in a	0.336***	0.289***	0.274***	0.280***
Matching	(0.0460)	(0.0467)	(0.0497)	(0.0494)
Time spent on human	0.0847***	0.0700***	0.0687***	0.0683***
capability skills (log months)	(0.0185)	(0.0222)	(0.0226)	(0.0221)
Programme duration	-0.00933	0.00872	0.00880	0.00968
(log months)	(0.0116)	(0.0126)	(0.0125)	(0.0126)
Employed at previous	0.155***	0.153***	0.152***	0.144***
wave	(0.0453)	(0.0494)	(0.0495)	(0.0491)
Trained at a treatment	0.0733**	0.0977***	0.0988***	0.0969***
site	(0.0285)	(0.0247)	(0.0249)	(0.0247)
Work experience prior		-0.0111	-0.0149	-0.00790
to wave 1		(0.0255)	(0.0248)	(0.0260)
Asian /Indian		0.142	0.139	0.143
Asian/Indian		(0.0996)	(0.0990)	(0.101)
Coloured		-0.0659	-0.0677	-0.0655
Coloured		(0.0526)	(0.0527)	(0.0523)
Male		0.0401	0.0417	0.0505
Itidle		(0.0280)	(0.0280)	(0.0303)
Eastorn Cano		0.0757*	0.0725	0.0689
Eastern Cape		(0.0431)	(0.0436)	(0.0416)
Free State		-0.0825**	-0.0848**	-0.0836**
Free State		(0.0378)	(0.0369)	(0.0362)
KwaZulu Natal		-0.0188	-0.0160	-0.0189
rwazulu Nalal		(0.0414)	(0.0421)	(0.0422)
Limpopo		-0.107**	-0.101**	-0.103**
		(0.0487)	(0.0495)	(0.0475)
Mpumalanga		0.103**	0.101**	0.105**
n purnalanya		(0.0463)	(0.0467)	(0.0464)
North West		-0.0441	-0.0473	-0.0422
		(0.0381)	(0.0379)	(0.0392)
Northern Cape		-0.239***	-0.254***	-0.262***
Northern Cape		(0.0375)	(0.0415)	(0.0443)
Western Cape		-0.0160	-0.0155	-0.00993
western Cape		(0.0525)	(0.0493)	(0.0499)

Table 13: Regression analysis: employment at waves 3 and 4

A cro		0.0301	0.0363	0.0365
Age		(0.0355)	(0.0354)	(0.0353)
		-0.000575	-0.000666	-0.000667
Age squared		(0.000637)	(0.000635)	(0.000634)
Resides in a metro		0.0600**	0.0570*	0.0586*
area		(0.0297)	(0.0299)	(0.0304)
N 4 - Hui -		-0.0916**	-0.0908**	-0.0900**
Matric		(0.0426)	(0.0433)	(0.0425)
		-0.0616	-0.0654	-0.0607
Certificate or diploma		(0.0447)	(0.0450)	(0.0443)
De sue e su bisches		-0.0935	-0.102	-0.0975
Degree or higher		(0.0675)	(0.0664)	(0.0649)
Household socio-			0.0113**	0.0135**
economic status (PC)			(0.00525)	(0.00559)
Food Insecurity (PC)			-0.00134	-0.00202
FOOD Insecurity (PC)			(0.00526)	(0.00531)
				-0.0112**
Job readiness (PC)				(0.00497)
Future orientation at				0.0305
wave 1				(0.0392)
Self-efficacy at wave 1				0.00952
Self-efficacy at wave i				(0.0239)
Risk tolerance (PC)				-0.0128
NISK LUIEI dI ICE (PC)				(0.00982)
Constant	0.238***	-0.145	-0.239	-0.386
CUISIGIII	(0.0294)	(0.474)	(0.470)	(0.475)
Observations	1,661	1,546	1,546	1,546
R-squared	0.077	0.103	0.107	O.111

Interestingly, these results do not change substantially when adding demographic controls (column 2), socioeconomic controls (column 3) and psychosocial controls (column 4). The final model (column 4) shows that receiving matching services is still associated with an employment gain of approximately 28 percentage points, implying that about 6 percentage points of the gain in employment found in the first model can be explained by demographic, socio-economic and psychosocial differences among participants. But nonetheless, fully 28% is attributable to the matching itself. The human capability skills effects are similarly robust, with this feature still associated with a 7 percentage point improvement in employment after controlling for other factors<sup>18</sup>. The effect of the treatment also remains, with financial capability associated with a 9 percentage point increase in employment probability. This finding is exciting given that ALMPs, as discussed above, generally do not have large impacts on employment. We explore this finding further in the next section.

Variables that are significantly negatively associated with employment include being resident in the Free State, Limpopo and Northern Cape provinces relative to Gauteng. This finding is not surprising given that economic growth in these areas is limited in comparison to that in Gauteng. Interestingly those residing in Mpumalanga are significantly more likely to be employed than those in Gauteng (by 10 percentage points). It is unclear why this is the case considering that youth unemployment rates in Mpumalanga are no better than those in Gauteng generally (Statistics South Africa, 2015). Higher socio-economic status and residing in a metro are both positively associated with employment, while having a matric (relative to incomplete secondary education) and higher baseline job readiness are both negatively associated with employment. These are

<sup>&</sup>lt;sup>18</sup> More accurately, we have measured the time spent on human capability skills training in log months. The positive coefficient on this variable implies that while the effect on employment of increasing time spent on human capability skills is generally positive, the first month of training for these skills is more useful than the second, and the value diminishes as the duration of human capability skills training increases. So, as months increases from zero to one, employment probability is estimated to improve by roughly 7 percentage points. For the second unit increase (from one month to two), it improves by an additional 5 percentage points. Adding a fourth month adds only 2 percentage points, while adding a 12th month adds just 0.6 percentage points.

somewhat puzzling findings that are discussed further in section 4.6. Interestingly, prior work experience, sex, race and age are not significantly associated with employment, suggesting that these traditional markers of disadvantage in the labour market can be overcome with the provision of the right types of training and labour market interventions; including human capability skills training and matching.

### Understanding the effect of the treatment on employment

As discussed previously, not only do treatment group participants do better on employment outcomes than control group participants, we can also see that even when controlling for a range of confounding variables the treatment emerges as having a positive effect on employment, increasing the chances of a participant being employed by an average of nine percentage points.

In order to better understand this finding we sought to understand what mechanism produces this effect. Our early hypothesis was that increased savings would help to facilitate better work search as it would address some of the costs that are associated with looking for work. However, when we assess self-reported savings of the treatment and control group at wave 4 (Table 15) we do not observe any differences (with similar results for the wave 3 data), suggesting that there is another mechanism via which the treatment works.

Table 14: Self-reported savings in a savings account by treatment and control at wave 4 (%) (Pr=0.62)

Savings account in your	Treatment or	control group?		
name?	Control	Treatment	Total number of observations	
Yes	87.0%	87.7%	769	
No	13.0%	12.1%	110	
Refused	0.0%	0.2%	1	
Total	100	100	880	

Research on the effects of savings accounts on college enrolment suggests that it is in fact future orientation that shifts when someone starts to think about saving, and that this in turn promotes better college outcomes (Elliott, Destin, & Friedline, 2011). We therefore sought to understand the relative effects of the programme features and the treatment on psychosocial factors such as self-esteem, self-efficacy, future orientation and perceived employability. This is shown in Table 15. For all of the outcomes we control for the demographic variables, socio-economic variables and psychosocial factors at wave 1 as we did in the abovementioned regression models on employment, with the output related to these controls omitted from the table.

 Table 15: Effects of programme features on psychosocial outcomes and self-perceived employability

VARIABLES	Self esteem	Self-efficacy	Future orientation	Employability
Matching	0.144***	0.625	0.0997***	0.236***
Matching	(0.0443)	(0.415)	(0.0339)	(0.0811)
Time spent on human capability	0.0871***	-0.0283	0.100***	0.0499
skills (log months)	(0.0209)	(0.199)	(0.0157)	(0.0438)
Programme duration (log	0.0384***	0.244**	-0.000318	0.0830***
months)	(0.0110)	(0.113)	(0.00897)	(0.0265)
Treatment	0.0532**	-0.238	0.0182	-0.0641
Treatment	(0.0210)	(0.225)	(0.0168)	(0.0454)
Observations	1,543	1,552	1,542	1,530
R-squared	0.100	0.033	0.086	0.074

Table 15 shows that matching significantly, and substantially, improves every metric except for self-efficacy. Programme duration is the only feature to have a positive effect on self-efficacy and is also positively associated with self-esteem and perceived employability. More time on human capability skills training also increases self-esteem and future orientation.

The treatment does not have as strong an effect on any of the variables as the other programme features and does not seem to improve future orientation as was found in other studies. It does however seem to be associated with a small increase in self-esteem. Self-esteem was measured using the Rosenberg scale (Rosenberg, 1965), with a total possible score of 40. It therefore seems that the treatment may operate via shifting self-esteem, which in turn mediates the employment outcomes. It is important to state that the shifts in self-esteem were not the result of any training component of the financial capability intervention that was specifically directed at improving self-esteem, in the same way as the human capabilities training conducted by each of the YEPs was. Indeed, the financial literacy module had a sole focus on financial literacy, covering

(a) financial concepts (such as interest, debt, compounding, investment and consumption), (b) how and where to save, (c) budgeting, and (d) banks and other financial institutions and navigating their regulations. Whether feeling empowered with financial knowledge leads to better self-esteem, and in turn greater employment probability, needs to be investigated in future analyses.

### Effects of programme features on nature of employment

Running the same regression model on other labour market outcomes gives us a sense of how different programme features influence the nature of jobs that employed participants access. To understand the nature of the work we assess how the programme features, controlling for the demographic, household socioeconomic status and psycho social features as in the initial model, shift earnings from work, earnings from self-employment, whether young people remain in employment between wave 3 and 4, and whether or not they have a formal employment contract (a proxy for job security).

The models are presented in Table 13. It shows that matching appears to significantly improve monthly earnings (by R2,400 relative to those who do not receive matching). This improvement may, in part, be explained by the fact that the two programmes that offer matching services operate in sectors that typically require higher skills levels that then in turn accrue higher salaries. Programme duration also has an effect. For every unit increase in programme duration, participants gain R539 per month in earnings from a job and R1,901 in earnings from self-employment (although the latter is not as strongly significant)<sup>19</sup>.

Matching is also the only feature (compared to no matching) that improves the likelihood of retaining a job, though this job is significantly less likely to be one with a formal contract. None of the features were positively associated with job security.

VARIABLES	Earnings from job	Earnings from self- employment	Continued employment	Job security
Matching	2,406***	-2,554	0.650**	-0.173**
Matching	(660.3)	(3,075)	(0.246)	(0.0713)
Time spent on human capability	566.4	-916.8	0.170	-0.0229
skills (log months)	(348.8)	(1,501)	(0.145)	(0.0354)
Dragramma duration (lag months)	539.1***	1,901**	-0.0330	-0.0188
Programme duration (log months)	(172.7)	(731.3)	(0.0574)	(0.0178)
Treatment	-8.238	377.0	-0.211	-0.0661**
Treatment	(394.7)	(850.5)	(0.142)	(0.0321)
Observations	387	76	88	410
R-squared	0.244	0.641	0.376	0.123

 Table 16: Effects of different programme features on other labour market outcomes

The qualitative data provide further insight into the kinds of work that the participants were engaged in. Of those participants who indicated that they were employed at the time of the in-depth interview, the most common positions were in fast food outlets, retail stores and as salespeople. Others were training as an apprentice or enrolled in a learnership. However, almost all of the participants had done some work for payment at some stage in their life, although they may not have been working at the time of the interview.

When we took into account all of the work described by the respondents, a prominent feature of their employment is the part-time, temporary and contract nature of the work. Overall, very few permanent full-time jobs were mentioned. Each participant had commonly held a number of short-term, temporary or part-time positions and had enrolled in variety of educational courses. Two brief examples, drawn from the in-depth interviews, of this pattern follow.

Sifiso completed Grade 12 in 2011. The following year he worked for six months at a construction company, assisting with the building of a rural school. Thereafter he moved to Vereeniging and completed a threeweek course in security. He then found contract work in which he changed lights in multi-story buildings. After nine months, when the contract ended, he moved to Welkom. Here he attended a seven-day course and received a certificate as an assistant mining engineer. He then found work in a general trading store, where he sold household appliances and clothing. After being mistreated by the store owner he resigned and moved back to Vereeniging. There he obtained a contract with a construction company that was

<sup>&</sup>lt;sup>19</sup> Duration is also measured in log months. As indicated in the previous footnote that explained the coefficient of log months spent on human capability skills training, the interpretation of duration of the programme in log months on earnings is that duration tends to improve earnings but at a decreasing rate.

building a school. During this contract, he did roofing for new buildings. This contract appears to have been of six months' duration. Thereafter, he moved to Boksburg where he enrolled in a three-month welding course. Mid-way through the course he got his driver's license. Thereafter he moved back to Vereeniging where he secured a contract doing cleaning work. While on this contract he received a phone call regarding an 18-month welding apprenticeship. At the time of the interview he was still enrolled in this apprenticeship, which is in Johannesburg. It is a full-time apprenticeship and upon completion he will be qualified as an artisan welder.

Peter worked as a volunteer presenter at a radio station while he was in Grade 10 and Grade 11. Occasionally he was paid for presenting. After finishing Grade 12, he rewrote maths to improve his mark, which he did. He then enrolled for a mechanical engineering diploma where he continued for one year but did not complete the course. He then enrolled in a youth employability programme where he stayed for one year. Whilst taking part in the youth employability programme he registered at a distance learning education institution for a Bachelor of Law degree. He is currently still enrolled in this course. He moved to Johannesburg and worked in retail for two months whilst continuing his studies and writing. He was not satisfied with the salary. Upon hearing about another job through his neighbour, he resigned and applied for this position in this company. He started in the call centre, then did data capturing and then applied internally for a procurement officer post. He signed a temporary contract as a procurement officer, and here he reported that the pay was exceptionally good as were the future prospects. After 6 months in this position the contract ended and was not renewed. He then returned home to Tzaneen where he bought and sold chickens. He then applied for a project management position and was successful. He signed a fixed term contract and was positive about the learning and the salary.

These common examples indicate that many young people are highly geographically mobile, moving frequently and over vast distances across the country in search of education and employment-related opportunities.

The courses people have attended vary greatly and include bookkeeping, security guard training, dental administration, basic ambulance assistance, motor mechanics, agriculture, marketing, fashion design, human resource management and mine assistant training. The examples also reflect the staggered nature of the transitions as young people shift between short-term employment or self-employment and various different forms of training as a way of building their skills profile to improve their opportunities.

Relating to their work experience, many have engaged in contract work. These contracts lasted from a few weeks to 18 months. A number of participants were currently enrolled in such contracts. Probably the most common way of finding work, outside of government work, was through family and friends who were currently employed and where they then found work.

Among those who were working at the time of their in-depth interview, there were mixed views on job satisfaction and prospects for growth. Some found their jobs meaningful while others just saw it as a source of income. Similarly, some saw opportunities for growth while others did not. For example, of those working in a fast food store (of the same fast food chain) one person reported that there were no opportunities for growth whilst another was positive about progression into management positions and saw the potential for owning a franchise one day. Another participant who had found employment at this fast food chain, through the youth employability programme, was already enrolled in management training. A person enrolled in an apprenticeship reported that his future was promising. Another person currently employed as a waitress saw potential for management positions and then becoming a franchise owner. Interestingly, one participant said that growth in her current job "depends on the type of person that you are... there are different ways that we use to get things ... some people bribe, others work hard".

There were those who were dissatisfied with their pay or working hours (both too many and too few hours worked). One participant felt that his current job was a form of exploitation as it did not cover all of his costs. Others spoke about how their salary just covered their transport costs. For those where this was the case, it often ultimately led to them quitting their jobs. A few had stopped work or dropped out of their studies due to falling pregnant. The prominence of travel and accommodation costs indicate that working close to home and living with family members greatly influences a person's job satisfaction by minimising basic expenses. This finding confirms recent research released by JPAL (2019), which shows that working close to home reduced expenses and did not negatively affect net wages.

Taken together, the qualifications, work experience and mobility of these respondents indicates the fluid, nonlinear and often erratic routes into and out of employment and training. There also seems to be considerable churn or cycling in and out of youth employability programmes. We see that work satisfaction and progression are influenced by intra- and interpersonal factors.

### 4.5. What shapes outcomes for those who are unemployed?

As mentioned previously, the majority of participants remained unemployed by wave 4. For this group we sought to understand whether the primary outcomes such as job search resilience, as indicated in Cluster 4 in Figures 1 and 2 improved or not. In a context of structural unemployment where young people are particularly adversely affected, much of the unemployment rate can be explained by demand side features of the labour market such as a lack of growth in the number of jobs. Within such a context any supply side and intermediation interventions can only be expected to shift employment outcomes marginally. But they could potentially play an important role in keeping young people connected to support mechanisms, and thereby promoting resilience rather than discouragement so that when jobs do become available they are poised to take advantage of them. For this reason, we sought to understand whether or not there were positive job search outcomes, such as increased resilience, amongst the unemployed group.

The effect of various programme features on improving psychosocial outcomes discussed in Table 12 could be pathways through which programmes improve employment probability. But this approach could also conceivably be beneficial for the unemployed, if these improvements enhance their resilience; that is, their continued efforts to persist in job search despite ongoing unemployment and the negative psychological effects (discussed above). Abel et al. (2019) find, for example, that engaging work-seekers in developing a plan for job search increases their commitment to the process.

Table 17 demonstrates the programme features that shape the duration of unemployment (months), whether the individual continues to engage in work seeking, and the number of job applications that have been made. As per the other models, demographic, household socio-economic status and psychosocial factors have been controlled for, with output omitted.

VARIABLES	Duration of unemployment	Work-seeking	Number of job applications
Mataking	-11.01***	0.192***	12.57***
Matching	(2.288)	(0.0531)	(4.243)
Time spent on human capability	-6.808***	0.0637**	1.018
skills (log months)	(1.119)	(0.0263)	(2.515)
	0.0627	-0.0136	-3.639*
Programme duration (log months)	(0.611)	(0.0155)	(1.980)
Tursturset	-1.129	0.0854***	0.547
Treatment	(1.202)	(0.0290)	(2.398)
Observations	614	1,099	762
R-squared	0.201	0.053	0.089

Table 17: Programme effects on resilience in the job market for the unemployed

For the unemployed at wave 3 or 4, having been part of a matching intervention has positive impacts on all three of the outcomes considered: it reduces average time unemployed, increases the number of job applications made, and also increases the probability of still being engaged in work-seeking activity. More time on human capability skills is also positively associated with two of the three outcomes. It significantly reduces the amount of time unemployed and it is positively associated with persistence in work seeking. Programme duration is negatively associated with the number of job applications, but this association is probably explained by the fact that more time in a programme necessarily reduces the amount of time available to apply for jobs. Finally, the treatment is strongly associated with a greater propensity to persist with work-seeking, suggesting that it too has protective effects for those who are unemployed.

## 4.6. The interaction effects of different programme features

The preceding regression analyses provide an indication of the average effects of different programme features, including the treatment, on employment. For example, for the average young person who receives matching services, a 28 percentage point increase in the chances of being employed is observed. However, from a policy perspective it may be useful to know not only what these average effects are, but also how different groups of young people may be impacted by the same interventions in different ways. Could matching be more useful for those without work experience? Or could human capability skills training be more useful for those without any tertiary education?

These kinds of effects are *interaction effects*, where the effect of a variable on an outcome (in this case, a programme feature on employment) depends on the values of a third variable. As explained above we use regression trees to determine interactions between programme features.

Figure 4 is a tree grown using the final regression model in section 4.4 as an input. Splits in the tree are limited to those significant at p < .05. This means that the differences in employment probability for the different subgroups that the tree branches into are statistically significant.



Figure 4: Regression tree explaining employment showing programme feature interactions

According to the tree, matching is the most important variable for explaining employment in the pooled sample, and is the first variable by which the algorithm chooses to split the sample. The tree predicts that for those who receive matching, employment rates are between 40% and 53%, depending on whether they are subjected to financial capability or not. This is therefore the first interaction: the financial capability treatment has a synergistic or supportive interaction effect with matching. For those who do not receive matching, predicted employment is much lower. Amongst this group, human capability skills training becomes very important: spending at least two weeks on human capability skills leads to significant employment gains compared to those with very little (less than two weeks) human capability skills training. For the latter, financial capability matters: at the first terminal node of the tree (the first point at which the splitting process ends), we see that for those not receiving matching, less than two weeks of human capability skills training, and no financial capability training, predicted employment is only 5%, whereas receiving financial capability training can improve predicted employment to 16%.

An interpretation of these results is that matching is the most effective programme feature of YEPs for increasing employment, with YEP graduates likely to do well in the labour market whether they have had extensive human capability skills training or not. Without matching, then human capability skills are very important. Finally, financial capability training has a synergistic effect with both human capability skills training and matching in stimulating employment prospects.

This regression tree has thus unearthed three important programme level interaction effects: matching and human capability skills; matching and financial capability; and human capability skills and financial capability.

## 4.7. The effects of programme features on different groups of youth

The regression tree in Figure 4 identified important interactions between programme features. The following table uses a series of Blinder-Oaxaca decompositions to split the pooled wave 3 and 4 sample of youth by various *demographic* features, in an attempt to identify which programme features work in differently stimulating employment for different groups of young people.

The first decomposition (Table 18) is by education level. Specifically, outcomes are compared between those whose highest level of education at wave 1 is less than matric and those for whom this attainment is *at least* matric.

VARIABLES	overall	explained	unexplained
Matching		0.0473***	0.00465
Matching		(0.0178)	(0.0160)
Time spent on human capability		0.00991	0.131*
skills (log months)		(0.0117)	(0.0753)
Output omitted			
		-0.000114	0.0595*
Work experience at wave 1		(0.000705)	(0.0304)
Output omitted			
Matur		0.0206*	-0.0551
Metro		(0.0110)	(0.0410)
At least metric	0.271***		
At least matric	(0.0252)		
	0.238***		
Incomplete secondary	(0.0551)		
1:66	0.0330		
difference	(0.0528)		
	0.0972***		
explained	(0.0338)		
	-0.0641		
Unexplained	(0.0434)		
Constant			-0.565
Constant			(0.524)
Observations	1,546	1,546	1,546

Table 18: Blinder-Oaxaca decomposition of employment by education level

Looking at the row marked 'At least matric' and the column marked 'overall', we see that those with at least matric have an estimated employment rate of 27%. Moving down the rows, for those with incomplete secondary education, 24% are expected to be employed. This difference of 3 percentage points is not statistically significant. However, the portion of this difference that is 'explained' - i.e. that is due to differences in endowments between those with incomplete secondary and those with at least matric - is 9 percentage points. This finding implies that differences in characteristics between the two groups should actually have led to a much larger difference in employment than was actually obtained (9% versus 3%). Looking at the column labelled 'explained', it is evident that matching and being in a metropolitan area drive the explained difference - those with less than matric are less likely to receive matching (indeed programmes that offer matching also had a mostly enforced minimum entry requirement of a matric qualification) and they are more likely to live outside the eight metropolitan areas, both of which are very significantly positively associated with better employment as per the regressions in section 4.4. The positive coefficients on matching and metro are interpreted as the gain in employment that those with less than matric would experience if they were exposed to matching, and to residence in metros, in the same way as those with at least matric. This gain accounts for at least 7 percentage points of the 9 percentage points that is explained by differences in endowments (all other non-significant effects have been omitted from the table).

There is therefore a set of factors that is mitigating reduced employment prospects for those with less than matric and other employment-reducing characteristics, chiefly residence outside a metro and not being exposed to matching, bringing the difference in employment between those with and without matric down by 6 percentage points to 3 percentage points. This protection against worse employment probability is explained by the time spent on human capability skills training: both groups do not have significantly different exposure to human capability skills training (as was the case with matching), but human capability skills training appears to have a significantly different coefficient, or effect, on those with less than matric (the difference in coefficients is 0.13, as shown in the 'unexplained' column). This explanation is intuitively plausible: going to a university or other tertiary institution arguably endows graduates with a set of human capability skills such as being punctual, communication skills, time management and team work. Those without matric or higher qualifications would therefore probably need human capability skills training from a YEP more than those exposed to higher learning. Those with less education thus benefit disproportionately from this programme feature. It protects against unemployment to such an extent that it almost eliminates the disadvantages from being less likely to reside in a metropolitan area and less likely to be exposed to matching. This finding

also suggests that having a matric qualification as an entry requirement for YEP participation is perhaps unnecessary: the large number of high school dropouts in South Africa can also benefit from YEP participation and improve their chances of finding work.

Other demographic characteristics that may interact with programme features in a similar way include sex, age category, area type (i.e. residence in a metro area or not) and work experience prior to wave 1. Decompositions by these variables were thus also conducted. No significant interactions by age category were discerned. For those living in metro areas, the decomposition suggests that the returns to human capability skills training are smaller than for those living outside the metros (which is consistent with the results for the decomposition by education level as detailed above). No other significant interactions between programme features and demographics were uncovered.

## 4.8. Participants' views of the YEPs

It is clear from our in-depth interviews that the YEPs in this study are making a positive contribution to these young people's lives. The respondents commonly reported that in addition to the skills they obtained, they enjoyed the programme, they made friends, they felt cared for and supported during the programme, and their fellow participants were like family to them. For example, a participant said that "it was nice there (in the programme). I was stress free...the group was so loving. We shared our problems and assisted each other". Another reported that "they (referring to programme staff) were more like family to me...they called to find out how I'm doing, have I found anything yet...they helped me in so many ways". Increased confidence, self-care, self-insight and self-esteem were other benefits mentioned.

The skills that they reported to have gained on these programmes varied greatly. Some human capability skills include workplace etiquette, punctuality, manners, customer service, confidence, communication, stress management, resilience, leadership, and public speaking. It was clear that most of the participants in the programmes were better emotionally equipped to deal with both workplace and other contexts, such as the job search environment, due to these human capability skills. The positive impact the programme had on the participants' emotional well-being is evident in the following quote: "...just after the programme I started to see possibilities and opportunities in everything".

The technical skills included computer literacy, data capturing, budgeting, welding, plumbing and sewing, to mention a few. In those organisations where the students were placed in work or training after leaving the programme, these technical skills proved important. However, for those who were unemployed at the time of the interviews, they reported that these skills had not assisted them in finding or creating employment. For example, one student who had learnt welding was certified as an Assistant Artisan and not able to find work. He indicated that he needed a trade certificate in order to qualify for work as a welder. Another respondent who had trained as a plumber said that he did not have any tools to do plumbing work and therefore was not using his skills at all. A further respondent indicated that he had received a certificate of attendance and that this document was not useful. Others who expected certificates did not receive them at all. Regarding the value of skills, one participant with a driver's license and qualifications as a boiler maker and as an ambulance assistant remarked that "These are not useful because I didn't get a job". It is therefore clear that the acquisition of these varied skills, although often viewed in a positive light, do not directly translate into employment. For these reasons, many of these participants are not practising in the fields in which they were



trained. A participant enrolled in an entrepreneurship programme emphasized this point when he said "...the (programme staff) should support people after they've finished the programme in order for them to make sure their work doesn't go to waste because most people that finished, they're not doing anything, they're just sitting, not working or not going to school". This highlights the need for a continued role for YEPs in matching job-seekers to employers even after they have graduated.

There was a diversity of views on the value and expectations relating to the youth employability programmes. Some were very positive about the programme and felt that it was the beginning of a brighter future. One person remarked that the programme was the first step in achieving their goals, another said that the programme "made me grow", while another said that the programme had inspired them to take control of their life. Some participants were still attending events organized by the programme, for example, networking events. The majority had found the programmes educational and interesting. Most participants valued the skills they had acquired and all valued the stipend they received. Relating to the stipend for example, a participant said "My expectation was met because it was money, it was able to provide money at the end of the month". Some even viewed the stipend as a salary. One participant said, "I enrolled in the programme for the money but when we started I realized that it's (the programme) so interesting and it broadens your mind and helps you build confidence".

Among the unemployed programme graduates, however, while they were positive about the value of the programme they were disappointed that the programme had not led to decent employment or in some instances even improved their employment prospects. One participant said that the programme was "better than sitting at home and doing nothing" but that it had not improved her employment situation at all. Many remarked that they thought that the programme (staff) would help them to find work and that this was not the case. This expectation is indicated in the following quote: "After the course that we did they were supposed to create jobs... it has been two years now since they promised us that they are looking for jobs". It is clear that some expected to start working after they had completed the employment programme and were disappointed to find that this was not the case. Some programmes that were supposed to place participants in the workplace once they had completed their training were reported not to have done so: "We were supposed to be placed in different companies after completing the training...to get outside experience but that did not happen. They also promised things like toolboxes...but that did not happen. We were waiting for work placements up until now...9 months". Similarly, another said, "There was nothing that happened after the programme. They promised to help us find jobs but they didn't". Another respondent mentioned that the programme was dropped and that he did not complete the programme. He did not know why the programme was not completed but he was told that they (the programme staff) would contact him but they never did. Others were told that they would be called about jobs but reported that they were never called. However, these sentiments were not shared by all. A respondent on Programme 3 said, "When we started the programme they were very clear that they were not going to look for jobs for us".

What is noteworthy is that many of the respondents had attended a number of programmes and short courses and had a diversity of short-term work experience. One respondent had done programmes in bricklaying, carpentry and plumbing. Another worked on the Expanded Public Works Programme before enrolling for Programme 6. Another had done a course with the Department of Health before enrolling for Programme 3. One of the participants had been enrolled at both Programme 1 and 4. These few examples were fairly common experiences and it is not surprising that people would rather attend training than stay at home. A few participants had dropped out of these youth employability programmes. Reasons for dropout were either not being paid in their apprenticeship or starting to study at a tertiary institution.

For those who were employed, there are mixed opinions on whether their employment was due to the youth employability programme or not. In the cases where the youth employability programme matches candidates to jobs or places them in apprenticeships, these positions were clearly attributed to the persons' attendance in the programme. In this regard, the participants' opinions mirror the quantitative analysis. Other employment such as selling sim cards, selling insurance, and working at a car wash were not attributed to the YEPs. A couple of the respondents were self-employed. One who was active in online Forex trading did not closely relate his position to the YEP. Rather, he felt that in the current job environment, and with his bad credit record, self-employment was his only option. The other self-employed participant indicated that the YEP had played a significant role in his career, primarily through developing his business idea and through the networking events.

## 4.9. Conclusion

The above findings point to the important role that YEPs can play in supporting youth as they navigate the labour market. In a context of limited support to work seekers generally, and young work seekers in particular, such programmes are critical sites for promoting human capability skills and for mediating an interface with employers for young people. Importantly, there is some evidence to suggest that they also mitigate gaps that low education levels and geographic location can create in employment prospects. Further, they play a role in supporting unemployed youth to remain connected to the labour market and persist with work seeking, rather than becoming discouraged. They thus play a preventive role in increasing job search resilience in the context of chronic unemployment. The effect of the financial capability intervention is particularly encouraging and requires further investigation to understand how the intervention works to produce these results.

# 5. DISCUSSION AND CONCLUSIONS

Young people's experiences of navigating the labour market are shaped by their positions within society. Those from more privileged backgrounds, who have had access to good quality education, transition relatively smoothly into higher or further education and on to their first full-time job. But for the majority of young people in South Africa, who come from poorer socio-economic households, and who have attended schools that provide them with a less than ideal education base, the pathway into and through the labour market is far more difficult to navigate. Existing evidence points to the staggered pathways that the majority of young people face as they seek to secure a job upon which they can build a future for themselves and their families (Isdale et al., 2016; Mlatsheni & Ranchod, 2017).

The participants of this study are broadly reflective of the kinds of young people who struggle to navigate the labour market. In terms of demographics, the participants were predominantly African (with some Coloured and Indian participants), female, and come from poor backgrounds. They had low income levels and few assets and in 20% of the cases, nobody in the household was employed.

Our analysis of their labour market and education experience prior to entering the programmes also showed that they had made significant efforts to gain the experience and qualifications required to make progress in a career. Just over 40% had accessed post-secondary education and training, but struggled to complete their education, largely due to an inability to pay fees. Roughly half of the respondents had prior work experience, typically engaging in part-time, short-term contract work or in survivalist self-employment activities. Further, over half of the sample (56%) had participated in some form of short-term skills training programme similar to the one they were participating in at the time of the study. These findings confirm that these are young people who are "zig-zagging" their way through a difficult labour market, using their agency and initiative to identify and take advantage of training and work opportunities that could increase their chances of securing a longer-term job.

For these young people, YEPs are a potentially important resource. They may be viewed by young people as viable options to keep building their skills and to access



information while they wait to obtain the kind of job that could change their circumstances. Dieltiens (2015) confirms the important role such organisations play as intermediaries for youth seeking work. So what does the evidence tell us about the role that these organisations play in the lives of such young people?

## 5.1. Affirming the role of YEPs amongst employed youth

The first important finding is that employment rates amongst the YEP participants appear to increase over time. Approximately a year after exiting a YEP, 25.99% of graduates were employed, increasing to 28.45% approximately two years after exiting a YEP. This confirms the work of Kluve and colleagues (2019) who note that the effects of ALMPs are larger over time. Further, when the pooled wave 3 and 4 sample is compared to a similar sample from the QLFS data, we find that Siyakha youth are 11 percentage points more likely to be employed. These findings are very positive, suggesting that a significant number of youth are able to navigate their way into a job after YEP participation.

Importantly, we also see that this improvement in employment outcomes is reflected in increased earnings. Here we see that average earnings improve from R2,233 per month (reported for the previously held most

important job) to R4,862 per month at wave 4<sup>20</sup>. This increase suggests an improvement in the nature of work, although of concern is that there was no improvement in the number of young people reporting having a secure work contract.

It is important to note that these changes are not necessarily attributable to the programmes themselves, but rather the result of a number of factors that accumulate to allow for this progression. For instance, young people who participate in such programmes already show high levels of self-efficacy and future orientation, which perhaps explains them applying for the programmes and places them in a better position in the labour market than those who do not apply. Demographic factors such as whether they live in a major metropolitan area or not also play an important role in explaining their employment outcomes. Nevertheless, young people from these programmes are more likely than a sample of youth matched on demographic features from the QLFS data to be employed two years after participating in the programme.

## 5.2. The role of YEPs for unemployed youth

While our primary outcome of interest is employment itself, in the context of structural unemployment, it is also important to consider intermediary outcomes such as work-search efficacy and resilience. In other words, can YEPs play a role in facilitating an ongoing connection to and orientation towards the labour market, and improve work-search behaviours, which might in time help the individual to secure work? When we assess these kinds of outcomes we see that the majority of YEP participants who were unemployed two years after programme completion continued to actively look for work. We also see a shift towards more effective work-search strategies, with more participants beginning to leverage social networks for job opportunities and information – widely viewed as being one of the most effective job search strategies (Mlatsheni & Rospabe, 2002; Schoer & Leibbrandt, 2006; Magruder, 2007; Narker, 2004). In a context of increasing discouragement among those who are unemployed (Statistics South Africa, 2019) and limited formal employment services to support work-search activities (Bhorat, 2012; Patel et al., 2015) these YEPs play an important supportive role for young people.

Indeed, when participants are asked about the programmes they typically reflect on how supported they felt during their participation, both by their peers and by programme staff. Evidently being connected to some form of support is a worthwhile effect of the programmes, even for those who remain unemployed.

## 5.3. What programme features make the difference?

Across all of the models that were run, regardless of the outcome of interest, and how other individual and demographic factors shape the outcomes, matching as a core programme focus emerges as the most important programme feature. In other words, when programmes attempt to match young people with employment opportunities the employment, earnings, and education outcomes are better. Even the work-search and resilience outcomes amongst unemployed youth are better if they participated in a programme that included matching. This finding suggests that YEPs play a critical role in mediating employer and work-seeker connections in an otherwise inefficient labour market.

This finding has two practice implications. The first is that there is evidence to show that close employerprogramme relationships are critical to the success of YEPs. Rather than training young people in a context of little understanding about what the skills requirements are in the area, YEPs should be encouraged to work closely with employers to tailor training to what employers require. The actual process of bringing youth and employers together post-training is also important to provide an opportunity for direct connection that could result in a job offer. Second, the success of matching as a programme feature points to the need to address inefficiencies in the labour market through better employment services. This finding, taken together with the very positive results of other employment support interventions such as encouraging work seekers to make work-search plans (Abel, Burger, Carranza & Piraino, 2019), and ensuring that work seekers include reference letters with their applications (Abel, Burger & Piraino, 2017), demonstrates that there is much to be gained from improving access to and quality of locally accessible employment services – something in which the South African government invests comparatively very little (Bhorat, 2012).

The finding has a third potential implication for employers. Young people from poorer socio-economic backgrounds, who do not have the educational qualifications to indicate their skills levels to employers are typically overlooked for jobs, even entry-level jobs. They simply do not make it into the pool of potential candidates. The evidence here seems to show that employers could work with YEPs to identify these potentially good candidates for jobs.

Next to matching, the emphasis on human capital skills development also emerges as an important programme feature. It is particularly important for those who are not exposed to programmes that include matching as a feature. Surprisingly, more exposure to human capital skills training even bridges the gap that not living in a metro area and having lower education levels creates in employment chances. This finding seems to suggest that YEPs can bridge the gaps in workplace skills and socialisation to which they are otherwise not exposed, if the programme includes an emphasis on human capital development.

<sup>&</sup>lt;sup>20</sup> As previously noted, this is most probably in excess of inflation.

Interestingly, work experience as a programme feature, programme duration, and technical skills exposure did not significantly affect employment chances. This finding suggests that a focus on working more closely with employers and matching is of more importance than the current emphasis on increasing the duration of programmes.

## 5.4. The effect of financial capability training on outcomes

Our hypothesis at the outset was that the inclusion of a financial capability intervention as a complementary intervention to the YEPs could potentially improve the chances of young people finding employment. This research presents evidence that indeed the financial capability intervention does seem to positively contribute to employment outcomes and could complement YEPs. Our research demonstrates that those who went through the financial capability intervention, made up of financial literacy education and the opportunity to open a saving account, were more likely to be employed two years after completing the programme, and that, even when controlling for other programme features and individual level characteristics, the financial capability intervention is still associated with a nine percentage point improvement in employment. The treatment was also revealed to improve the outcomes for those who remained unemployed; it improved their work-search resilience.

Exactly how the treatment enables these outcomes requires further analysis. The treatment group does not report higher actual savings. The pathway to this outcome could operate through improved financial management skills, availability of funds to cover job-search costs, improved financial stability, or shifting psychosocial outcomes and agency amongst participants, which in turn shifts their employability. Further analysis on how the intervention leads to the outcome is thus required.

## 5.5. Limitations and further research

The findings regarding the effects of the financial capability intervention are encouraging, but they also need to be further tested; first, to understand what it is about the intervention that gives rise to the effects we see on employment, and second, to test the intervention in different contexts to determine whether it has the same kinds of effects if it is rolled out without the YEP. There is thus much more to test in relation to the impact of financial capability interventions on employability and employment, but this study presents some data to suggest that such research would be warranted.

Second, across the ALMP evaluation literature there is a criticism that displacement effects are not accounted for. McKenzie (2018) argues that programmes are simply "shifting the queue" to place participants into jobs that would have otherwise been filled by non-participants. Although this study, like most others in the ALMP field, was not designed to assess displacement effects, we view this criticism as moot in the context of the South African labour market. Given the evidence of labour market inefficiencies and the inequalities in employment that are in part explained by the significant barriers that particular groups of young people face in accessing the labour market, we would argue that YEPs potentially play a critical role in shifting labour market inequalities and for this reason alone are warranted. Further, our evidence shows that when training is aligned to employer demands in growth sectors they have more positive outcomes, suggesting that participants are taking up jobs in sectors where there is net demand in jobs. The findings of this study and previous studies show how complex the pathway to employment is and how much investment is required to support young people to transition to employment.

A possible area for further research is a cost-benefit analysis. While the YEPs are low to no-cost programmes for the participants themselves, the investment in training is significant. Harambee reports an investment of R6,000 and R60,000 per participant for retail and hospitality and corporate training programmes respectively. NYDA reports an investment of R36,000; and TSI and FFLFFW average around R4,000 investment per participant. While these investments may seem large, the complexity of the pathway to employment in the context of the South African labour market and the deep inequalities that continue to shape employment prospects warrant such investments.

## 5.6. Looking forward

The staggering youth unemployment rates, depicted in the statistics that are so often reported on in the media and in research, often mask the lived experience of unemployment and the difficulties that so many young people face as they navigate the labour market. In the context of low job growth and an inefficient labour market, young people must struggle to navigate the pathways to secure work largely independently, with very few resources to assist them in this process.

Within such a context, YEPs play an important supportive and preventive role. Previous research has made the case for YEPs as important local level intermediaries for youth (Dieltiens, 2015). This study provides the evidence to show that indeed YEPs have an important role to play as sites of information and training that can enable youth who are already taking steps on the employment path to improve their chances of finding work. Importantly, the qualitative evidence shows that YEPs create spaces where young people can access information, feel supported, and connect with others on a similar journey – important resources in an otherwise difficult journey towards employment.

Where such YEPs include matching and sufficient human capability skills development the chances of finding work are that much better. We also find positive effects on work search resilience. Targeted at younger youth, these programmes could therefore be viewed as a strategy to prevent chronic unemployment and keep young people engaged in the labour market. And the inclusion of an easy-to-run, low cost financial capability intervention seems to add value in terms of improving employment chances.

As was argued in the introduction, South Africa employs a range of ALMPs to address unemployment. These ALMPs exist along the continuum from supply side skills training programmes, intermediation services, entrepreneurship promotion, and job creation programmes. Earlier evidence shows that in South Africa, like in most other countries, there is an over-reliance on supply side interventions without the requisite attention paid to demand-side interventions (African Development Bank, 2012; Graham et al., 2018). Effective strategies to address unemployment must place increasing emphasis on job creation. However, even in a context of job growth, labour market inefficiencies contribute to persistent inequalities in employment. These inequalities run along the lines of SES and race as well as geographic location. The findings of this study show that YEPs, complemented by a financial capability intervention, can work to address these inequalities and contribute to breaking the cycle of disadvantage and exclusion.

Indeed, Kluve et al. (2019) and Card et al. (2017) argue that ALMPs work better in low- and middle-income country contexts than they do in high-income country contexts. They argue that ALMPs that combine multiple programme features work well in such contexts, most probably because they address the effects of deeply embedded disadvantage. Our research confirms this finding showing that combining matching, human capability skills development, and a financial capability intervention can play a significant role in shifting employment prospects, even for the most disadvantaged youth. This study therefore contributes to a deeper understanding of the kinds of intermediation and skills training programmes that are required to address the complexity of labour market transitions in the country.

In the context of low job growth and structural unemployment, it might be tempting to dismiss the effects of such programmes. However, even in a context of vibrant economic growth that produces jobs, young people from poor socio-economic backgrounds, who have been exposed to poor quality education, are likely to remain "left behind", excluded from the fruits of what such economic growth has to offer. YEPs play a critical role in ensuring their connection to the labour market, particularly given the low investment in formal employment services in the country. YEPs therefore play a critical role in addressing inequalities in access to the labour market. Further, and most importantly in the short-term, support for young people who are unemployed is woefully limited and difficult to access. The role that YEPs play in promoting resilience and supporting the agency of young people in such a context cannot be overstated.

For these reasons, the ALMPs in the form of YEPs and a financial capability intervention, that are assessed in this study are important tools in a suite of interventions to address youth unemployment and promote the social mobility of young people.



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