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The employment environment for youth in rural South Africa: A mixed-methods study

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Abstract

South Africa has high youth unemployment. This paper examines the predictors of youth employment in rural Agincourt, Mpumalanga Province. A survey of 187 out-of-school 18–24 year olds found only 12% of women and 38% of men were currently employed. Men with skills/training were significantly more likely to report employment, mostly physical labour (aOR: 4.5; CI: 1.3, 15.3). In-depth interviews with 14 of the youth revealed women are perceived more suitable for formal employment, which is scarce informing why women were more likely to pursue further education and yet less likely to be employed. Ten key informants from local organisations highlighted numerous local youth employment resources while, in contrast, all youth in the sample said no resources were available, highlighting a need for the organisations to extend their services into rural areas. As these services are focused on entrepreneurship, programs to increase financial literacy and formal employment opportunities are also needed.

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Keywords

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1. Introduction

Persistently high youth unemployment is one of the biggest social and economic challenges in South Africa. Several analyses of the 1995 October Household Survey and the 2005 Labour Force Survey have concluded unemployment is highest and rising the fastest in the younger cohorts; the broad unemployment rate among 20 to 24 year olds is estimated to be 52.3% compared to 36.0% for 25 to 29 year olds (Yu, 2013). Unemployment in South Africa also disproportionately affects youth who are black, female, and/or living in a rural area (Mlatsheni & Rospabe, 2002; D Lam, Leibbrandt, & Mlatsheni, 2010). In the rural Mpumalanga Province of South Africa, over 70 per cent of the population is under the age of 35 and the unemployment rate is higher than the national average (Mpumalanga Provincial Government, 2011).

Research from South Africa demonstrates high youth unemployment is associated with negative health and economic outcomes in both the short- and long-term. In the short-term, it is associated with higher crime, substance use, HIV risk, and ceasing to search for jobs (Booysen & Summerton, 2002; Rankin, Roberts, & Schoer, 2012). In the long-term, a gap between youth finishing school and finding work impacts future wages and thus long-term wellbeing (Freeman & Wise, 1982; Posel & Casale, 2011; Rankin et al., 2012).

HIV rates in South Africa are also among the highest in the world and the burden of HIV falls disproportionately on young women (UNAIDS, 2014). In 2012, 17.4 per cent of 20–24 year old women compared to 5 per cent of men were infected with HIV (Shisana et al., 2014). Young women are 3–4 times more likely to be HIV-infected than men their age (Pettifor et. al, 2005). Unemployment among young women in South Africa can increase their vulnerability to HIV by increasing their economic dependence on male partners and potentially increasing unsafe sexual behaviors (Booysen & Summerton, 2002; Shisana et al., 2014). Understanding the factors associated with youth employment in rural South Africa may help inform interventions to improve the socioeconomic status and HIV risk of youth.

The aim of this study was to identify factors associated with employment for out-of-school youth in rural Mpumalanga, South Africa, and to help identify promising strategies to increase employment and reduce HIV vulnerability. It also aligns with an existing cash transfer program in the Agincourt sub-district incentivizing young women to stay in school (MacPhail et al., 2013). Being in school is associated with decreased HIV vulnerability but once youth graduate or drop out and are unable to find work, HIV risk may increase (Pettifor et al., 2008). In South Africa, it is particularly difficult for many youth to find work because the economic growth in rural areas may be slow and sectors that do grow rapidly may require workers with higher skills than youth would graduate with (Burns, Godlonton, & Keswell, 2010; International Labour Office, 2012; Mpumalanga Provincial Government, 2011). Despite these difficult employment circumstances, some youth do find work.

This mixed method study used both quantitative data—to find out how the youth who find work differ from their peers—and qualitative data—to describe the pathways through which these differences could lead to employment. The characteristics we hypothesized could predict employment were informed by prior studies. For demographics, being married or being a parent could increase the odds of youth employment (Mlatsheni & Rospabe, 2002). Completing high school and passing matric are also likely to increase youth's ability to obtain work (Ardington, Barnighausen, Case, & Menendez, 2013; D Lam et al., 2010; Mlatsheni & Rospabe, 2002). Although, training certificates or diplomas may be a more important predictor of employment than education as it can signal to the employer the presence of more concrete skills (Burns, Edwards, & Pauw, 2010; Mlatsheni & Rospabe, 2002; Rankin et al., 2012). Beyond qualifications, it seems youth with relatives or friends who are working may have more information on job vacancies thus increasing their chances of employment. Finally, with regards to psychology, youth who are more confident in their entrepreneurial skills are probably more likely to be employed, as employed youth in South Africa are concentrated in self-employment (International Labour Office, 2012; Rankin et al., 2012). Also, employed youth often have greater life satisfaction compared to unemployed youth (Lloyd & Leibbrandt, 2013; Mlatsheni & Rospabe, 2002; Witte, Rothmann, & Jackson, 2012).

2. Methods

We conducted semi-structured quantitative surveys (n=187) and in-depth interviews (IDIs) (n=14) with 18–24 year old youth, and key informant interviews (n=10) with government and nonprofit organisation leaders from the rural Mpumalanga Province. Youth participants were sampled from the Agincourt Health and Socio-Demographic Surveillance System (HDSS) now covering some 110 000 people in 31 villages. The HDSS conducts an annual census update to collect health, socioeconomic and population information on all residents in the study area; descriptions of the cohort have been published previously (Kahn et al., 2007, 2012). We randomly sampled out-of-school youth from one of the largest and smallest villages covered by the HDSS to maximize the breadth of employment experiences in the sample. Although the Agincourt HDSS study area is rural, agriculture is not a predominant form of local employment due to the region's arid climate.

2.1 Procedure

The study and consent procedures were approved by the Institutional Review Board of the University of North Carolina at Chapel Hill, USA and the Human Research Ethics Committee (Medical) of the University of the Witwatersrand in Johannesburg, South Africa. Data were collected from June–July 2013. Using the HDSS sampling frame, we randomly sampled 447 households that met the following eligibility criteria: at least one household member was 18–24 years old, not currently enrolled in school, and living in the area consistently for at least the past six months. We sampled youth living in the area in order to capture youth employed locally rather than youth engaged in migrant labour. Of the nearly 600 individuals contacted by the fieldworkers, over 300 were ineligible because they had moved out of the area or re-enrolled in school since the last census (Figure 1). It is common in this area for students who failed grade 12 to repeat it, which could explain the high

proportion of our sample that were unexpectedly still in school (Lam, Ardington, & Leibbrandt, 2011). Despite evening and weekend data collection, more women were enrolled than men, likely due to the higher prevalence of labour migration among men (Collinson et al., 2006). Surveys were conducted in Shangaan and lasted one to two hours.

Participants for the IDIs were recruited from the quantitative sample. Individuals were purposively sampled on employment status, gender and age to maximize the diversity of our IDI sample along key sociodemographic lines. Interviews were with one respondent and one trained interviewer, audio-taped, conducted in Shangaan, lasted one to two hours, and then were transcribed and translated into English. To sample key informants, we inquired with local staff and researchers and used government websites as well as recommendations from other informants. These interviews were conducted in English and transcribed by the author, they lasted one to three hours. Information from the IDIs and key informant interviews were carefully analyzed (Section 2.4).

2.2 Measures

Measures included in the quantitative semi-structured survey were largely adapted from existing youth employment and household socioeconomic questionnaires, many from sub-Saharan Africa (Bandiera et al., 2009; The World Bank, 2013; Medical Research Council, 2014). The completed survey had eleven sections: A household roster, household assets, demographics, education history, employment history, job environment perceptions and expectations, professional network, loans and savings, job skills and training, financial literacy, and three scales to assess self-confidence in entrepreneurship, empowerment attitude, and overall life satisfaction.

2.2.1 Outcome: employment—Employment status was assessed by asking participants whether the respondent had performed a range of employment activities in the past four weeks (e.g. construction, office work). If a respondent reported receiving compensation for any activity, they were considered employed. The vast majority of employed respondents reported informal work so this was collapsed with the formal work category.

2.2.2 Independent variables: demographics—As a very small proportion of the sample reported being widowed, divorced or cohabiting, we collapsed **marital status** into a binary variable of those currently married and those not. **Being a parent** was also a binary variable generated from responses to the question of ‘How many living children do you have?’

2.2.3 Independent variables: Education, training and skills—Educational attainment was assessed on a range from no education at all to completing university. The majority of the sample clustered around less than high school or completing high school and so education was coded as a binary variable indicating completing high school or not. **Passing the school-leaving matriculation exam** (matric) was assessed separately and only the respondents who reported not taking matric at all were coded as missing. Respondents were also asked if they had **completed a post-secondary diploma or a diploma in progress**, likely through a training college that often offers both formal and vocational

education and some connections to employment (McGrath, 2004). For skills, respondents were asked if they possessed any of a range of **working skills** (e.g. computer skills) and were also able to give additional skills not listed. The skill list was adapted from the World Bank Urban Youth Employment Project Eligibility Screen (The World Bank, 2013). Finally, respondents had the opportunity to list general or business **trainings or apprenticeships** they had completed. Respondents who completed any training in these categories were identified with a binary variable. Respondents were also asked if they were **seeking work** and their **desired work sector** at age 30.

2.2.4 Independent variables: social networks—If a respondent reported having an employed household member or employed friend (within or outside the study area), they were coded as having a **professional network**. Counting employed household members, regardless of relationship, as a respondent's professional network is consistent with previous analyses (Burns et al., 2010).

2.2.5 Independent variables: psychosocial—Psychological scales used in the survey were adapted from the Brac Uganda Adolescent Development Program (Table 1; Bandiera et al., 2009). The first scale assessed **self-confidence** in entrepreneurial tasks (Cronbach's alpha=0.83) by asking participants to rank, on a scale of 1–10 (10 = *high*), their ability to do ten tasks (e.g. 'manage financial accounts'). Using the same scaling system, the **empowerment attitude** scale (Cronbach's alpha=0.76) asked respondents to rank how true ten statements were for themselves (e.g. 'I often make plans for the future'). The **overall life dissatisfaction** scale (Cronbach's alpha=0.68) asked participants to rank on a scale of 1–7 (7 = *high*) their dissatisfaction with aspects of their lives (e.g. job, house). An item from this scale asked about satisfaction with friends but the responses had so much heterogeneity that the item dropped the scale's alpha to 0.58 and so was excluded. For each of the three scales, answers were summed into a continuous score and reverse coded where necessary.

2.2.6: Sociodemographic characteristics—Age, socioeconomic status (SES), and village of residence were used as control variables in these analyses. SES was measured using asset quintiles, which range from one to five (one being the lowest quintile). This measure was derived from the HDSS SES index based on household assets, which we collected detailed data on (Collinson et al., 2009). All respondents identified as black/African and all but two identified as South African. An indicator variable denoted village of residence.

2.2.7: Descriptive variables—To inform future intervention development, information was also collected on respondents' financial situation and overall financial literacy. Specifically, respondents were asked whether they had **savings; the amount and source of savings; motivation for saving**; and whether they had a **bank or post office account**. Respondents also completed a six-question **financial literacy test** (Table 2) for which scores ranged from 0 to 6 (6 = *high*).

2.3: Statistical analysis

All models were stratified by gender. Adjusted and unadjusted logistic regression models were used to assess the relationship between each independent variable and employment, the key outcome of interest. Hypothesized confounders were age, asset quintile and village of residence and were left in adjusted models if they were statistically significant. Referent groups were chosen based on a priori hypotheses to produce estimates above the null. For example, we regressed employment on education with not completing high school as the referent and we ran the models, separately for males and females, with and without measures of the hypothesized confounders.

2.4: Qualitative interview guides and analysis

The IDIs were semi-structured with questions about the economic environment, the interviewee's employment experience, barriers to employment, and resources to aid in the school to work transition. One set of a priori codes were established based on the interview questions (e.g., one code was used when youth mentioned what they or other youth did for employment and another code was used when youth mentioned specific employers by name). The a priori codes were updated iteratively as coding progressed allowing for new themes to emerge (e.g., different employment opportunities for males and females). The Dedoose software program was used for all qualitative coding (SocioCultural Research Consultants, 2013).

Key informant interviews were semi-structured with questions on the economic environment for youth, what their organisation did to help youth make the school-to-work transition, and what more they thought was needed to foster youth employment. The transcripts were read multiple times, and summarized to capture key points relating to each interview topic. Findings from the IDIs and key informant interviews informed our interpretation of the quantitative findings.

3. Results

3.1: Descriptive Analyses

Descriptive information on the youth sample is presented in Table 3. The average age was 22.3 years and just over half of the sample was female (54%). Marriage was relatively rare, though nearly three times as many women (17.9%) reported being married as men (6.2%). Over 70% of women reported having at least one child compared to less than 20% of men. Of the 10 key informants, four were women and six were men and they held a range of positions in their respective organisations (4 were youth leaders, 5 were regional managers for national programs, and one was a national leader).

3.2: Employment

Less than one quarter of respondents reported employment in the past four weeks. The proportion of men reporting employment (38.3%) was more than twice as high as the proportion of women (12.3%). Nearly 80% of men reported currently seeking work compared to just over 60% of women.

3.3: Education

More than half of respondents reported completing high school (57.2%) or passing matric (56.2%). More men (60.5%) reported completing high school than women (54.7%) but the proportions who reported passing matric were similar (55.5% versus 55.7%).

3.4: Skills & Training

Women were more likely than men to have completed (23.6% vs. 18.5%, respectively) or currently be completing a diploma outside of school (13.2% vs. 6.2%) whereas men were more likely to report having received skills or training (66.6% vs. 47.2%). The most common diplomas were in computing, security, and medical services, though there was a wide range. The most cited training opportunities were related to physical labour (e.g. forklift, plumbing). When respondents were asked what sector they desired to be working in when they are 30 years old, 48.54% of women said clerical work. By comparison, the two most common responses for the men were mining (16.2%) and clerical work (16.2%).

3.5: Psychosocial

Women and men were similar in their high levels of self-confidence and empowerment. Out of 100 possible points, where a higher score meant higher self-confidence in entrepreneurship, men scored 82.7 on average [standard deviation (SD): 13.9] and women had an average score of 80.6 (SD: 13.4). Similarly, out of 100 points on the empowerment attitude scale, men scored an average of 84.0 (SD: 13.4) and women 84.3 (SD: 9.7). Interestingly, men and women also shared similarly moderately high levels of overall life dissatisfaction. Out of 42 possible points, where a higher score signaled higher dissatisfaction, men scored 27.2 (SD: 8.9) on average and women scored 26.9 (SD: 9.3) on average.

3.6: Finances & Financial Literacy

The financial characteristics and literacy of the sample are included in Table 4. Fewer than half the sample reported having savings, though more than half of these reported their savings amount as zero, and all but one of these respondents reported keeping them at a bank. Among those who did report some savings, the mean amount saved was 488 Rand or about $46. For both men and women the most common source of savings was parents (63.6%) but the second most common source was earnings from work for men (27.50%) and ‘other’ for women (24.4%). Most respondents cited future expenditures (55.2%) as their main motivation to save, but beyond that, men were more likely than women to say future study (27.5% vs. 6.7%) and women were much more likely than men to say future child expenditures (27.7% vs. 2.6%). None of the respondents picked wedding expenses as a reason to save. Approximately half of the respondents reported having a bank account and less than ten % reported having a post office account. Only one respondent reported ever taking out a loan. Overall, the scores on the financial literacy test were low; of a maximum score of six points, the average score was less than three for men and women.

3.7: Logistic regression models

Table 5 presents results for the unadjusted and adjusted logistic regression analyses stratified by gender. Men who reported having working skills or training were much more likely to be employed, compared to those with no working skills [adjusted odds ratio (aOR) 4.5; 95% confidence interval (CI) 1.3, 15.3]. For women, the only variable significantly associated with employment was greater life dissatisfaction (aOR 1.1; 95% CI 1.0, 1.2).

Though most of the independent variables did not have a significant association with employment, the magnitude and direction of some point estimates do warrant attention. The aOR for completing high school was above one for women (aOR: 1.6; 95% CI: 0.4, 6.3) but not men (aOR: 0.6; CI: 0.2, 1.8), and women with skills and training also seemed to have higher odds of employment (aOR: 1.9; CI: 0.5, 6.9). Finally, the aOR was quite high for women who reported having children (aOR: 3.6; 95% CI: 0.4, 30.3) indicating mothers in our sample may be more likely to work than childless women. However, it is important to note for all of these point estimates, the confidence intervals were wide due to the small sample size.

3.8: Qualitative Findings

Results from the IDIs provide context for the regression results. Overall, respondents felt there were many barriers to youth employment in Mpumalanga. The three most commonly mentioned barriers were lack of skills, lack of information on job openings and an overall lack of jobs. In the words of a 20 year-old male respondent, ‘Lack of qualifications and experience, that’s why we are not getting jobs. They [employers] will tell you that they want 10 years’ experience or 5 years’ experience and a driver’s license, or a certain diploma or a degree, only to find that you don’t have any of these.’

When asked about what employment opportunities existed for youth in the rural area respondents consistently and spontaneously outlined different employment opportunities for men versus women. The most commonly listed forms of employment were construction (e.g. brickmaking) for men and hair braiding or paid domestic work for women. Other types of employment were occasionally listed without gender specifications and these included selling things in the market, working in the tourism/game reserves, or doing odd jobs (e.g. fetching firewood). As unemployment is very common among youth in this setting, we also asked the IDI respondents what youth generally do during the day. Most responses fell into one of the three categories as outlined by this 23 year-old female respondent, ‘Some when they wake up they do women’s duties, some…go to sell their stuff and some when they wake up they bathe and go to the tavern [bar].’ Many respondents also said youth do nothing during the day or spend time with friends.

Given the apparent gender differences in employment opportunities, respondents were also asked if they thought women had a harder time finding jobs compared to men. Most respondents felt that women had a harder time finding work and one respondent, a 21 year-old female, explained it in the following way: ‘Young women have a harder time than men because there are lots of jobs outside that need power and those jobs are for men. For example a woman can’t pick up a brick to build a house. Women need easy jobs like

working with a computer.' Other respondents said young women can have a harder time finding work because they have young children, lack skills, or that there is stigma against women in many professions.

The key informant interviews provided helpful context for the youth comments in the IDIs. Notably, all of the key informants listed resources available for youth to help them in the school-to-work transition, whereas no youth we interviewed mentioned any such resources, even when asked. The resources listed by the key informants ranged from government agencies to nonprofit organisations as well as private companies. The support these groups provide included: Training, both formal (e.g. vocational diplomas, entrepreneurship development programs) and informal (e.g. talks on CV writing); resources (e.g. computer labs, business development grants, scholarships); and activities (e.g. community events, after-school activities, youth-led education campaigns).

A few key informants mentioned that, though there may be resources in the urban areas in the province, rural youth may lack information about or transportation to these resources. In the words of one key informant 'Those opportunities are not situated where those people are…is there a newspaper in [rural areas], I don't know?' Only one organisation was identified as using local volunteer leaders to collect information on opportunities for youth and distribute them in rural areas. Further, there seems to be a lack of communication between the organisations, as expressed by one key informant, 'I can't even tell you where the [organisation] offices in Bushbuckridge are.'

4. Discussion

In this study we used both quantitative and qualitative methods to examine factors associated with youth employment in rural South Africa. Overall youth unemployment was very high and the data indicate that factors associated with youth employment differ for men and women. The national average of youth unemployment in South Africa (just over 50%) is significantly lower than the 75% unemployment in this sample but this higher estimate is in line with recent region-specific data from Mpumalanga (Yu, 2013). There were more than twice as many men employed in our sample as women, and the odds of employment were highest for men who reported having skills or training. Men were more likely to report having skills than women and women were more likely to pursue further education than men. Further education did not seem to increase the odds of employment for women.

Gender differences in the type of skills and training that men and women have in the study reflect the opportunities that are common in the area. If men are concentrated in construction jobs, it makes sense they would benefit from skills and training, most of which were in physical labour. If women are only considered eligible for more formal employment, this could explain why they are more likely to seek diplomas and why they appear to be more likely to find work if they have completed high school. However, if, as many of the IDI respondents asserted, construction jobs are more prevalent than formal jobs in the region and it is only appropriate for women to do the latter, this could explain why twice as many men in the sample were employed compared to women.

Though these data are cross-sectional, which prevents us from making causal inferences, the associations reported here lend themselves to informative interpretations. That training and skills were significantly associated with employment for men could indicate that learnerships, or paid training provided by employers, are effectively helping youth get jobs (Mayer, 2011). Alternatively, the significant relationship between working skills and employment could indicate these employed youth received training on the job and now have working skills, changing the directionality. However, the most commonly cited employment barrier for youth was a lack of skills and experience, so it makes sense that youth who reported having skills were more likely to be employed.

For women, only greater life dissatisfaction was significantly associated with higher odds of employment. Though it is possible people who are more dissatisfied may be more motivated to seek employment, it is not clear why this would apply only to women. Further, past research supports this finding. A 2012 report from the International Labour Office (ILO) emphasizes that employed youth in developing countries often fare worse than youth who are not in education, employment, or training because employed youth may have to work in order to survive and so in desperation take jobs that keep them stuck in a cycle of poverty (International Labour Office, 2012). This strain may be especially salient for the women in the sample because over 70% of them are mothers, and the majority are unmarried, and thus burdened with providing for themselves and their children while fewer than 30% of men reported having children. Indeed mothers in our sample had nearly 3.5 times higher odds of employment compared to childless women.

The South African labor market is a difficult one for youth to enter. South Africa's economy is shifting to value more skilled labour (Banerjee et al., 2008; Burns et al., 2010). Also, South African employers face high costs for layoffs due to labour regulations and so want to verify a worker's productivity before hiring (Rankin et al., 2012; Yu, 2013). The youth interviewed in the IDIs repeatedly reiterated this point saying that employers require training certificates and work experience. Given the shifting economic context in South Africa, it is fitting that the three most common resources provided by the organisations the key informants represented were: entrepreneurship development, computer access and training, and more formal skills training. This is in line with current best practices in youth employment promotion. Though youth entrepreneurship programs are likely not a silver bullet because youth ventures are higher risk, require capital investment that youth do not have, have lower wages, and do not decrease the risk of future unemployment (Burns et al., 2010; International Labour Office, 2012). Also, given that financial literacy was very low in this sample, it appears funding for entrepreneurial projects must be preceded by financial education.

Fundamentally, though the key informants identified many employment resources for youth, every single one of the youth in our sample said there were no employment resources for youth in their area. This demonstrates a clear need to connect more rural youth to local resources already available, most of which were within 45 minutes of where the youth lived. It is possible however, that youth are aware of the resources but do not find them valuable, suggesting an evaluation of local employment programs could be useful.

The main limitations of this study stem from the relatively small, though random, sample and the cross-sectional design. This study was a pilot study intended for hypothesis and intervention generation. Also, the survey questions were adapted from many sources and some measures were not previously validated in the southern African context. Finally, since our analyses did not include youth who had out-migrated for employment-related reasons, we were unable to study factors associated with finding employment outside of the study area. However our results are generalizable to the large youth population residing in the study area.

5. Conclusion

In this study we identified factors associated with youth employment in rural Mpumalanga, specifically training for men and possibly education for women. Our qualitative findings showed improving youth awareness of and access to employment resources already available in the local area is a feasible next step. However, as many of these resources are focused on developing youth entrepreneurs, it is important these programs are paired with financial education. Further, in an economy that is shifting to value more skilled labour, formal sector job creation also remains a critical long-term priority, especially for women who have less access to informal jobs and for whom economic insecurity can increase vulnerability to HIV (Booysen & Summerton, 2002; Mpumalanga Provincial Government, 2011; Shisana et al., 2014). Increasing youth employment in rural South Africa would improve the local economy, community, and would also likely decrease women's vulnerability to HIV (Booysen & Summerton, 2002).

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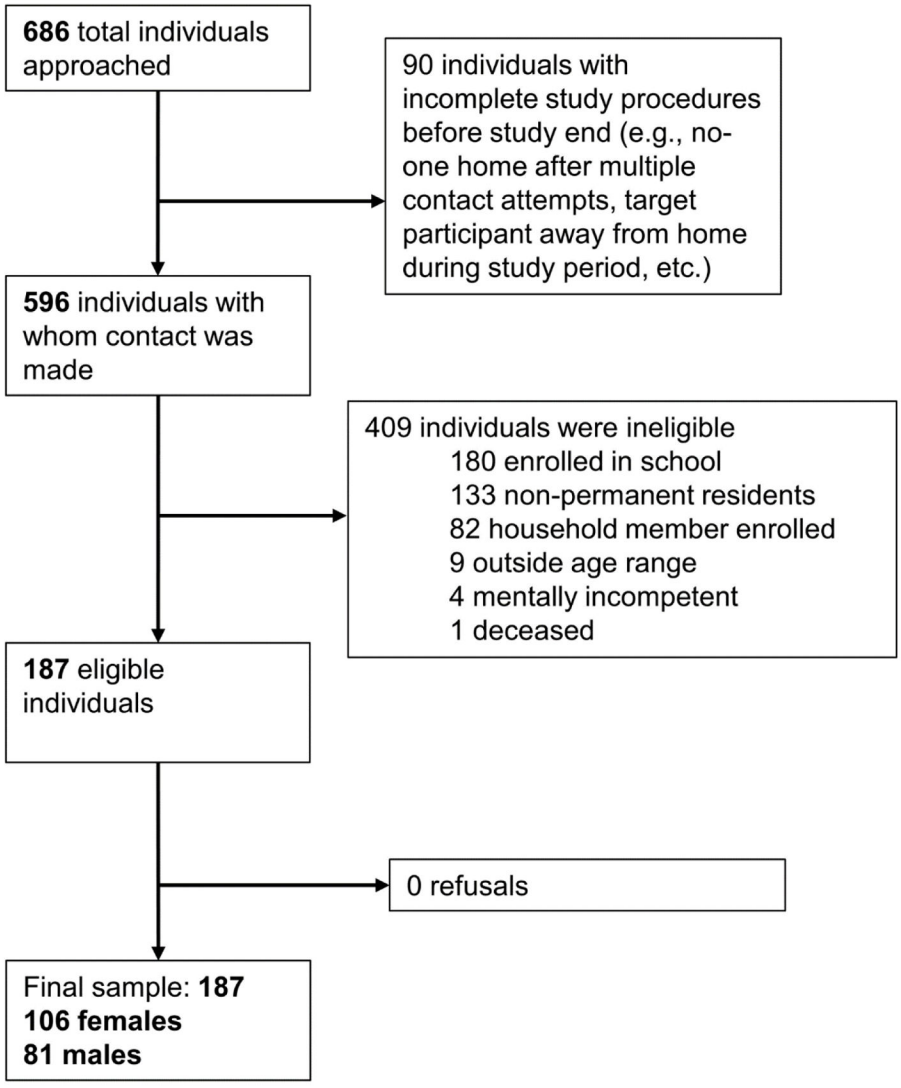

Figure 1. Flow chart of sample recruitment

Notes: Starting with a random sample of 447 households and 686 individuals, contact was made with 596 individuals, 187 of whom were eligible and all of whom consented to participate.

Table 1

Items in psychology scales

Self-confidence in Entrepreneurial Tasks (10–100)
Rate your ability to do task from 1–10, 1: cannot do activity, 10: definitely can
Run your own business
Identify business opportunities to start up new business
Obtain credit to start up new business or expand existing business
Save in order to invest in future business opportunities
Make sure that your employees get the work done properly
Manage financial accounts
Bargain to obtain cheap prices when you are *buying* anything for business (inputs)
Bargain to obtain high prices when you are *selling* anything for business (outputs)
Protect your business assets from harm by others
Collecting the money someone owes you
Empowerment Attitude (10–100)
Rate how true each statement is to yourself, 1: not at all 10: a lot
If I start working on a task, I definitely see the end of it no matter how difficult it is.
While doing any task, it is important for me to do it better than others.
If I have the chance, I would make a good leader.
I want to be a respected person in my village.
I do not care what others think about my success or failure
I am in control of what happens in my life
I save regularly
A person can get rich by taking risks[a]
I often make plans for the future
I believe that my future is determined by luck no matter how hard I work[a]
Overall Life Satisfaction (7–42)
Rate how happy you are with each aspect of your life, 1: completely happy, 7: not at all happy
Your education level?
Your family?
Your friends?
Your job or employment prospects?
Your earnings/income?
The house you live in?
Life as a whole?

Note: Items were reverse coded in the final scale. The friends item was dropped from the Overall Life Satisfaction scale as it showed very low variability and improved the Cronbach's alpha.

Table 2

Items in financial literacy test

What are the things you need to know in order to make a budget?
NOTE: Can list more than one
Income*
Expenditure*
Savings
Don't know
Other
Is there any difference in the interest rate of a current account and savings account in a bank?
If so, which one gives a higher interest rate?
Savings account*
Current account
Same interest rate
Suppose you have deposited 100 Rand in the bank for an interest of 10 Rand per year. If you withdraw all the money after 2 years, how much will you get?
120 Rand
Out of five of the things being mentioned to you, mention any three that you think is important while taking a loan?
Name of the loan officer
Rate of interest*
Time of meetings
Fine or delay in repayment*
Number of installments*
Suppose you need to take a loan of Rand 1000 and you have two choices. In one is you pay an interest of Rand 10 every month and in the other you pay an interest of Rand 120 at the end of the year. Which one has a higher interest rate?
1st option (monthly)
2nd option (yearly)
Same interest rate for both*
What will happen to the price of firewood if the price of kerosene increases?
Increase
Decrease*
Unchanged

Note: Correct answers are denoted with an asterisk (*)

Table 3

Characteristics of the Sample

	Total (n=187) No. (%) or M ±S.D.	**Men (n=81) No. (%) or M ±S.D**	**Women (n=106) No. (%) or M ±S.D**
CONTROLS			
Age	22.3 ± 1.8	22.1 ± 2	22.4 ± 1.7
Asset Quintile			
1	20 (10.7)	5 (6.17)	15 (14.15)
2	47 (25.13)	24 (29.63)	23 (21.7)
3	37 (19.79)	17 (20.99)	20 (18.87)
4	23 (12.3)	13 (16.05)	10 (9.43)
5	40 (21.39)	13 (16.05)	27 (25.47)
Missing	20 (10.7)	9 (11.11)	11 (10.38)
INDEPENDENT VARIABLES			
Marital Status			
Never Married	149 (79.68)	69 (85.19)	80 (75.47)
Married	24 (12.83)	5 (6.17)	19 (17.92)
Cohabiting	11 (5.88)	5 (6.17)	6 (5.66)
Divorced/Separated	3 (1.6)	2 (2.47)	1 (0.94)
Number of Living Children			
0	95 (50.8)	67 (82.72)	28 (26.42)
1	61 (32.62)	8 (9.88)	53 (50.00)
2	27 (14.44)	6 (7.41)	21 (19.81)
3	4 (2.14)	-	4 (3.77)
Educational Attainment			
Some primary	5 (2.67)	2 (2.47)	3 (2.83)
Completed primary	6 (3.21)	5 (6.17)	1 (0.94)
Some high school	69 (36.9)	25 (30.86)	44 (41.51)
Completed high school	102 (54.55)	46 (56.79)	56 (52.83)
University or technikon	5 (2.67)	3 (3.70)	2 (1.89)
Passed matric	105 (56.15)	45 (55.56)	60 (56.6)
Completed diplomas outside of school	40 (21.39)	15 (18.52)	25 (23.58)
Completing diplomas outside of school	19 (10.16)	5 (6.17)	14 (13.21)
Employment			
Currently employed	44 (23.53)	31 (38.27)	13 (12.26)
Seeking work in past 3 months	129 (68.98)	64 (79.01)	65 (61.32)
Have working skills	86 (45.99)	50 (61.73)	36 (33.96)
Received skills training	47 (25.13)	30 (37.04)	17 (16.04)
Received business training	42 (22.46)	23 (28.4)	19 (17.92)
Network			
Relatives working	168 (89.84)	74 (91.36)	94 (88.68)
Friends working	75 (40.11)	40 (49.38)	35 (33.02)
Psychosocial			

	Total (n=187) No. (%) or M ±S.D.	**Men (n=81) No. (%) or M ±S.D**	**Women (n=106) No. (%) or M ±S.D**
Self-confidence in entrepreneurship (max=100)	81.5 ± 13.6	82.7 ± 13.9	80.6 ± 13.4
Empowerment attitude (max=100)	84.2 ± 11.4	84.0 ± 13.4	84.3 ± 9.7
Life dissatisfaction (max=42)	27.0 ± 9.1	27.2 ± 8.9	26.9 ± 9.3

Table 4

Financial characteristics of the Sample

	Total (n=187) No. (%) or M ±S.D.	**Men (n=81) No. (%) or M ±S.D.**	**Women (n=106) No. (%) or M ±S.D.**
FINANCES			
Have savings	87 (46.52)	40 (49.38)	47 (44.34)
Savings Amount (Rand)	488.1 ± 600.8	508.3 ± 734.0	474.9 ± 513.5
Source of savings			
Parents	54 (63.53)	23 (57.50)	31 (68.89)
Earnings from work	14 (16.47)	11 (27.50)	3 (6.67)
Other	17 (20.00)	6 (15.00)	11 (24.44)
Motivations to save			
Future expenditures	44 (55.16)	23 (58.97)	21 (44.68)
Bad times	9 (10.47)	4 (10.26)	5 (10.64)
Further study	19 (22.09)	11 (28.21)	8 (17.02)
Wedding expenditures	0	0	0
Child expenses	14 (16.28)	1 (2.56)	13 (27.66)
Have a bank account	95 (50.80)	43 (53.09)	52 (49.06)
Have a post office account	16 (8.56)	6 (7.41)	10 (9.43)
FINANCIAL LITERACY			
Test score (0–6)	2.77 ± 0.85	2.83 ± 0.75	2.73 ± 0.92

Table 5

Odds ratios for odds of employment for demographic, training, education, skills, social network, and psychosocial predictors

	Men (n=81)		Women (n=106)	
	Unadjusted OR (95% CI)	**Adjusted OR (95% CI)**	**Unadjusted OR (95% CI)**	**Adjusted OR (95% CI)**
Demographic				
Marital Status				
Not married	1.00	1.00	1.00	1.00
Married	1.08 (0.17, 6.86)	1.81 (0.22, 15.0)	1.44 (0.36, 5.84)	1.02 (0.18, 5.67)
Number of Living Children				
None	1.00	1.00	1.00	1.00
At least one	1.26 (0.39, 4.05)	1.40 (0.33, 5.84)	4.91 (0.61, 39.6)	3.57 (0.42, 30.3)
Education, Training, and Skills				
Educational Attainment				
Less than high school	1.00	1.00	1.00	1.00
High school or more	0.55 (0.22, 1.37)	0.62 (0.22, 1.77)	0.96 (0.30, 3.08)	1.63 (0.42, 6.34)
Did not pass matric	1.00	1.00	1.00	1.00
Passed matric	0.90 (0.20, 4.14)	1.16 (0.24, 5.73)	0.85 (0.16, 4.65)	1.07 (0.17, 6.63)
No completed diplomas	1.00	1.00	1.00	1.00
Completed diplomas	0.77 (0.24, 2.51)	0.66 (0.16, 2.74)	0.97 (0.24, 3.83)	0.73 (0.13, 4.07)
No diplomas in progress	1.00	1.00	1.00	1.00
Diplomas in progress	0.38 (0.04, 3.60)	0.40 (0.04, 4.21)	0.51 (0.06, 4.28)	1.08 (0.11, 11.1)
No working skills/training	1.00	1.00	1.00	1.00
Have working skills/training	4.09 (1.35, 12.4)*	4.49 (1.32, 15.3)*	1.94 (0.59, 6.38)	1.89 (0.52, 6.92)
Social Network				
No relatives/friends working	1.00	1.00	1.00	1.00
Relatives/friends working	0.91 (0.32, 2.55)	1.31 (0.40, 4.28)	1.13 (0.32, 3.94)	1.09 (0.28, 4.18)
Psychosocial				
Self conf.entrepreneurship	0.99 (0.96, 1.02)	0.99 (0.95, 1.02)	1.03 (0.98, 1.08)	1.04 (0.98, 1.10)
Empowerment attitude	0.97 (0.92, 1.03)	0.97 (0.92, 1.03)	1.00 (0.93, 1.08)	1.00 (0.93, 1.08)
Life dissatisfaction	1.04 (0.98, 1.09)	1.03 (0.97, 1.10)	1.13 (1.04, 1.23)**	1.13 (1.03,1.24)*
Control Variables				

	Men (n=81)		Women (n=106)	
	Unadjusted OR (95% CI)	**Adjusted OR (95% CI)**	**Unadjusted OR (95% CI)**	**Adjusted OR (95% CI)**
Age		1.02 (0.79, 1.32)		1.26 (0.83, 1.91)
Asset Quintile		1.23 (0.81, 1.85)		0.65 (0.40, 1.04)
Village		0.31 (0.09, 1.08)		0.62 (0.16, 2.38)

Notes: The control variable estimates are illustrative as they were similar across all tests.