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# Education and Youth Unemployment in South Africa

*by*

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## 1. Introduction

The problem of high youth unemployment is a global phenomenon. According to an International Labour Office study in 2004, youth (15-24) make up nearly half (47%) of the world's unemployed, 88 million out of 186 million, even though youth are only 25% of the world's working age population. Of the world's 550 million working poor who cannot lift themselves above US $1 per day poverty measure, 150 million are youth. The ILO estimated in 2004 that halving global youth unemployment would increase global GDP by US $2.2 trillion, 4% of global GDP. These statistics lend weight to the notion that youth unemployment is a problem worthy of attention. In addition, one may argue that addressing unemployment in general would also lower poverty levels and add to GDP (World Bank 2006).

South Africa is an important case study of the problem of youth unemployment. The country has had a pervasive unemployment problem for the last forty years. Standing *et al* (1996) report that unemployment rose sharply in the 1970s and that this rise continued through the 1980s and 1990s. Another longstanding characteristic of South African

unemployment is lengthy unemployment duration. In the mid 1990s nearly two thirds of the unemployed had never worked for pay (Standing et al 1996). This feature of the unemployed has persisted. The 2005 Labour Force Survey indicates that 40 percent of unemployed individuals (by the strict definition) have unemployment durations exceeding three years, while 59% of the unemployed have never had a job at all. These findings accord with the earlier findings of Kingdon and Knight (2000) who found that in 1997, 37 percent of the *searching* unemployed experienced unemployment durations of more than three years. Things are even bleaker for the non-searching unemployed and non-participants. Dinkelman (2004) examined the transition patterns between different labor market states of African cohorts living in KwaZulu-Natal between the periods 1993-1998 and found that fewer than 10 percent of those who were in this non-searching group in 1993 were employed in 1998. In sum, chronic unemployment is a long-standing feature of the South African labor market and this has created an unfavourable climate for youth to enter the labor market.

Research focusing explicitly on youth unemployment in South Africa is not new. Studies of youth unemployment prior to the mid 1990s (see Everatt and Sisulu 1992, Truscott 1993 and Van Zyl Slabbert 1994 among others) mainly focused on two issues. First, they detailed the bleak circumstances of youth. This literature provides a moving account of the role that youth played in the fight against apartheid and the negative consequences of this commitment for their personal prospects. Most pertinent for this paper is the discussion of the deficiency in educational accumulation of these youths and its likely negative effect on their employment prospects. Indeed, given the political turbulence and consequent educational disruption of youth in the 1980s there were fears that this youth cohort would become a 'lost generation' (Riordan in Everatt & Sisulu 1992). A number of subsequent papers have analyzed various dimensions of youth unemployment in South Africa, including Wittenberg and Pearce (1996), Mhone (2000), Mlatsheni and Rospabe (2002),

Deficiency in youth education and labor market preparedness is still a relevant concern in contemporary South Africa. The March 2005 Labour Force Survey reveals that 42% of African youth who are between 15 and 24 years of age had stopped their studies and entered the labor market. What is troubling is that more than 60% of these youth have less than a matric (complete secondary) qualification, while 33% have nothing more than a complete matric. As 59% of this group experience unemployment, it is a puzzle why many of these youth quit school before they acquire matric. With such a high unemployment rate, there should be a strong case for further studies even for those that do have a matric certificate. Resource constraints are one obvious candidate to explain this outcome. Indeed, resource constraints are prolific in the developing country context and limit educational attainment on two fronts. First, many individuals wishing to pursue further studies simply cannot afford to do so. Second, even those individuals that obtain funding for further studies may opt for earlier entry into the labor market, even at low pay in mediocre jobs, in order to supplement family income (World Bank 2006). This is especially the case when there are younger siblings in need of support.

Human capital theory assumes that individuals have perfect foresight about future earnings for every level of education. In reality though, youth are plagued by a great deal of uncertainty. This is especially true of those from less privileged backgrounds. Youth are uncertain about the value of their abilities and schooling as well as the timing of job offers and earnings after studies. In addition, they have no control over future labor demand and they are uncertain about their longevity. Concerns about longevity are likely to be prominent in areas where illness, gang activity, and crime are rife (World Bank 2006). This uncertain reality and the real constraints facing South African youth need to be given attention. However, it is hard to believe that these concerns override the strong signals coming to youth about the value of staying in school.

In this paper we offer a more detailed interrogation of the role of education in youth employment and unemployment. A more detailed review (Lam, Leibbrandt and Mlatsheni 2008) reveals that there are a large number of youth who leave school only to join the ranks of the unemployed and that some of these youth remain unemployed for a number of years. At the same time, the review indicates that complete secondary education and tertiary education are increasingly important in facilitating a move into employment; hence the puzzle alluded to earlier as to why these youth do not at least complete secondary education.

The paper homes in on this issue using a youth panel survey that holds the possibility of throwing a fresh perspective on youth labor market transitions. We make use of a newly collected longitudinal youth data set, the Cape Area Panel Study (CAPS). In Section 3 we describe these data and analyze transitions from school into the labor market in urban Cape Town. In Section 4 we use probit regressions to investigate the role of education in the transition from unemployment to work. In Section 5 we draw some conclusions. Given that CAPS focuses on Cape Town, Section 2 contextualises the Cape Town youth labor market in the national context using a descriptive analysis of 2001 Census data. This section provides a broad overview of the contemporary youth unemployment situation in South Africa. Also, it makes the case that an analysis of youth unemployment in Cape Town will generate insights that are useful at the national level and for the youth unemployment discussion in general.

## 2. Youth unemployment in Cape Town in a national perspective

By way of introducing the sections using the Cape Area Panel Study, we now turn our attention to a comparison of Cape Town and the rest of South Africa using the 2001 census 10% micro-data set. This is the largest data set available to us for a post-2000 analysis. We restrict our comparison to the age ranges 14-22 years old because this coincides with the age ranges of the youth that were included in the first wave of CAPS. According to the 2001

census, Cape Town makes up just over 6 percent of South Africa's population and 11.3 percent of the urban population in the 14 to 22 age group.

Table 1 compares a population breakdown by race for this age cohort in Cape Town and the rest of South Africa. It shows that Africans make up the overwhelming majority (82%) of the South African population while the shares of coloureds and whites are almost equal at 8% and 7% respectively. The composition of the Cape Town population is very different, however. Almost half of the population of Cape Town is coloured, while 35% is African and 14% is white. Comparison of Cape Town's racial composition with that of the rest of the urban areas indicates that Cape Town's unique history has resulted in something of a reshuffling of the African and coloured race groups. The racial profile of the rest of urban South Africa is similar to the profile of the country as a whole but the shares of Africans and whites are affected by the overrepresentation of Africans in rural areas.

Table 2 shows that the education profile of youth aged 14-22 in Cape Town is very similar to that of the rest of urban South Africa, with the main difference being that there is a lesser share of the Cape Town population with no schooling or some primary schooling and a slightly higher share with incomplete secondary and complete secondary schooling. The effect of including the rural areas of South Africa in the comparison is to increase the shares of the lower education groups. Many of the youth in this age range are still in school. Table 3 breaks down the activities of these youth for Cape Town and the rest of South Africa. The table also shows the racial breakdown of the Cape Town figures. As the rest of the country is dominated by Africans, the figures from the rest of the country are driven by Africans. In addition, the share breakdown of whites and coloureds in Cape Town is very similar to that of the whites and coloureds in the rest of South Africa. Therefore we do not report racial breakdowns for the rest of the country. The table shows that the population group with highest proportion of youth engaged in studies is the white group (65%), followed by

Africans (52%) and coloureds (43%). Also evident is the fact that a very small percentage of white youth are unemployed (4%) compared to African youth (28%) and coloured youth (22%).

The key points from these tables are the following: while youth unemployment in Cape Town may be lower than in other parts of South Africa, it follows the same patterns. Most importantly, the role of education in a successful move into employment seems to be very similar in the urban Cape Town labor market as it is elsewhere in the country. Moreover, the racial marker is as strong in Cape Town as it is elsewhere. At the same time, the presence of a substantial coloured population occupying an intermediate position between Africans and whites allows for additional subtlety in exploring the interactions between race and education. Thus, there is real interest in what can be learned from the school/labor market transitions and the unemployment/employment transitions of Cape Town's youth. It is to this that we now turn.

## 3. Transitions between school and the labor market in the Cape Area Panel Study

While much can be learned from analysis of large cross-sectional data sets such as the census, these data sets provide only a limited picture of the experience of young people when they first enter the labor market. In this section we take advantage of recently collected longitudinal data, the Cape Area Panel Study (CAPS), to get a richer picture of the dynamics of transitions from school to work. Details about the design of CAPS, a collaborative project of the University of Cape Town and the University of Michigan, are available in Lam, Seekings, and Sparks (2006)[1]. Wave 1 of CAPS, which was collected in 2002, included 4,752 young people aged 14-22, living in 3,304 households. CAPS was designed as a stratified two-stage clustered sample with stratification on the predominant population group

[1] Technical documentation and background information is available on the CAPS web site, www.caps.uct.ac.za.

living in each sample cluster. CAPS oversampled areas classified as predominantly African and white in order to produce larger samples of African and white respondents than would be present in a simple random sample. As discussed above, Cape Town is the only major city in South Africa to have substantial numbers of white, coloured, and African residents, providing unique opportunities for the study of the changing nature of inequality after the abolition of apartheid.[2]

Wave 1 of CAPS contains two major sources of data. First, the survey includes a household questionnaire, in which demographic data on the entire household is collected. Second, the survey includes a detailed young adult questionnaire, which collects data on schooling, employment, and fertility of household members between the ages of 14 and 22. It also includes a basic numeracy and literacy skills test administered to each youth respondent. The results of this test will be used in the analysis below. CAPS youth respondents were interviewed a second time in either 2002 or 2003, a third time in 2005, and a fourth time in 2006. We use data from all waves in our analysis below, taking advantage of the retrospective reports on monthly employment and job search provided in each wave. Overall attrition between Wave 1 and Wave 4 was about 20%, with lower attrition among younger respondents and among the coloured sample, which has strong roots in Cape Town. The African attrition rate was about 25%, with most of the attrition resulting from migration back to the Eastern Cape, a predominantly rural province that serves as the main sending region for Africans living in Cape Town.

[2] As in most South African household surveys, CAPS response rates were high in African and coloured areas and low in white areas. Household response rates were 89% in African areas, 83% in coloured areas, and 46% in white areas. Young adult response rates, conditional on participation of the household, were quite high, even in white areas. Given household participation, response rates for young adults were 93% in African areas, 88% in coloured areas, and 86% in white areas (Lam, Seekings, and Sparks 2006).

A major focus of this section is the comparison of transitions from school to work for African, coloured, and white youths. These three population groups were subject to very different treatment under apartheid. Many of these apartheid-era differences are likely to continue affecting young people in the post-apartheid period. Whites had advantages in a wide range of areas, including significantly higher expenditures on schooling, privileged access to the labor market, unrestricted residential mobility, and better access to most social services. Africans had the least access to services and the most restrictions on work and migration, with a large gap in expenditures on schooling. The coloured population, which is heavily concentrated in Cape Town, occupied an intermediate status under apartheid, with higher expenditures on schooling, fewer restrictions on residential mobility, and better access to jobs.

***Patterns of schooling and work***

This section provides an overview of some key patterns in school enrollment, grade attainment, and labor force activity that form the backdrop for understanding transitions from school to work. Table 4 shows several important indicators of schooling for CAPS respondents aged 16-17 and 21-22 in CAPS Wave 1 in 2002. The results are broken down by gender and population group. Although all these young people are above the age of compulsory enrollment, 86% of African females and 89% of African males aged 16-17 are enrolled. This is higher than the enrollment rate for coloured youth, although coloured grade attainment exceeds African grade attainment by half a grade for females and a full grade for males. White enrollment at age 16-17 is over 95% for both males and females, with white males having almost two grades more schooling than African males. The fact that Africans have relatively high enrollment rates but are significantly behind in grade attainment is evidence of the high rates of grade repetition in predominantly African schools. As shown by Anderson, Case, and Lam (2001) and Lam, Ardington, and Leibbrandt (2007), grade

repetition is a fundamental feature of African schooling. As seen in Column 4, 49% of African males aged 16-17 are two or more years behind their appropriate grade for age (assuming a school starting age of seven), compared to only 7% of white males and 27% of coloured males.

Looking at respondents aged 21-22 in Table 4, 31% of African males are enrolled in some kind of educational program. About 2/3 of these are still enrolled in secondary school (not shown), another manifestation of the high rates of grade repetition. As seen in Table 4, white males have a schooling advantage of more than two full grades over African males at age 21-22, with 88% of white males having passed the grade 12 matriculation exam, compared to only 34% of African males. Another important feature of Table 4 is the fact the females have higher schooling than males in all three population groups and both age groups. As pointed out by Anderson, Case, and Lam (2001), girls move through school faster than boys in South Africa, with lower rates of grade repetition and higher final grade attainment.

Figure 1 looks at transitions from school to work using both the retrospective histories from Wave 1 and the longitudinal data on work and school reported in 2003, 2004, and 2005. For each single year of age from 12 to 23 the sample is divided into four possible activities – (1) enrolled but not working; (2) enrolled and working; (3) working but not enrolled; (4) not working and not enrolled. Enrollment includes post-secondary schooling and formal training programs, in addition to primary and secondary school. Work is defined broadly, and includes any work done during the year. This includes work during school vacations, so it is important to keep in mind that the work/school combination does not necessarily imply that work was being combined with school. The sample used in Figure 1 is respondents who were age 23-25 in 2005.

Looking at the results for males in Figure 1, we see large differences in the transitions from school to work across population groups. While being in school without working is by

far the predominant activity for all three groups at age 14, by age 17 some sharp differences have emerged. Significant proportions of white males are working during years when they are still in school, with 45% of white boys in the work and school category at age 17. In contrast, African males have extremely low rates of work. The percentage of African boys who work during years when they are still in school is negligible, never exceeding 5%. The transition from school to work for coloured males is characterized more by a sharp transition than it is for either white or African males. Relatively small proportions of coloured males work during the years they are in school, with the proportion working exceeding the proportion enrolled at age 18. The proportion of coloured males enrolled in school drops below that of both Africans and whites by age 16.

The patterns for males in Figure 1 are broadly similar to the results for females, with males having somewhat higher percentages working at most ages. One of the striking features of Figure 1 is that differences across population groups are much larger than differences between males and females within a given population group.

The large racial differences in transitions from school to work are further demonstrated in Table 5, which shows three measures of work activity for CAPS respondents aged 16-17 and 21-22 in 2002. Columns 2 and 6 show the percentage of young people who were currently doing any work for pay or family gain at the time of the Wave 1 survey. Columns 3 and 7 show the percentage who did any work during the 12 months prior to the Wave 1 survey, while Columns 4 and 8 show the percentage who report having every done any work for pay or family gain. As in Figure 1, work is defined broadly. Table 5 reinforces the stark racial differences in employment experience shown in Figure 1. Only 1% of African females and 7% of African males aged 16-17 report having ever done any work, compared to 28% of coloured females, 38% of coloured males, and over 50% of white males and females. By age

21-22, only 26% of African females and 37% of African males have ever worked, compared to 84%-96% for the other groups.

Summarizing the patterns in Figure 1, Table 4 and Table 5, we see that African teenagers in Cape Town tend to have high rates of school enrollment, high rates of grade repetition, and low rates of employment. These patterns are very similar to those that would be found for African youth in all of South Africa (Anderson et al., 2002). Limited labor market opportunities, driven in part by extreme spatial segregation that is a legacy of apartheid, presumably plays an important role in explaining both the low employment and the high school enrollment. Coloured youth have significantly higher employment rates than African youth, a possible reflection of both closer geographic proximity to jobs and the legacy of the coloured labor preferences that existed in the Western Cape under apartheid. There appears to be more of a trade off between school enrollment and work among coloured youth, especially for males. Whites have both the highest rates of employment and the highest levels of school enrollment and schooling attainment, an indication that work and school in the teenage years are not entirely incompatible.

***Employment transitions after leaving school***

One of the unique features of the CAPS data is that we have collected monthly data on school, work, and job search covering the period from August 2002 through the time of the Wave 4 interview in 2006. These data are collected retrospectively in each wave of the survey. Figure 2 shows how these data can be used to follow the transitions of young people into the labor market after leaving school. The sample used in Figure 2 is all respondents who left school (identified as three consecutive months out of school) and were observed in the monthly calendars for at least 36 months since leaving school. The figure shows the proportion of males in each population group that were working in each month since leaving school, as well as the four months prior to leaving school.

As shown in the top panel of Figure 2, about 35% of coloured men were working in the first month after leaving school (typically January after the end of their last year in school). About 25% of coloured men were already working during the last four months before leaving school. The percentage of coloured men with jobs rises rapidly during the first 6 months out of school, reaching about 50% after 6 months, with about 60% working after 12 months. African men start at a much lower base, with only about 10% working in the first month after leaving school. This rises slowly to about 25% after 12 months. This suggests that dropping out of school in order to work is a relatively unimportant cause of leaving school for Africans. Africans continue to find jobs at a relatively slow rate in the next two years, with about 40% working in month 24 and about 50% working in month 36 (note that the sample remains constant across months).

There is a significant divergence in the line for "ever worked" from the line for "current work." For coloured men, for example, there is very little increase in the percentage currently working from month 12 to month 24, even though the percentage who had ever worked increases by about 15 percentage points. Similarly, African men have about a 20 percentage point increase in the percentage who have ever worked between month 24 and month 36, about double the increase in the percentage currently working. This suggests that there is considerable turnover in the youth labor market, with the flow of new entrants into employment being offset by the exit of men who were previously working. Since CAPS has data on all labor force transitions, we plan to explore this potentially important labor market volatility in future research.

The second panel of Figure 2 shows the proportion of African and coloured youth who were searching for work (and did not have a job) in each month. The proportion searching jumps sharply in the first month after leaving school, rising to about 20% for both African and coloured males. Coloured males get jobs at a higher rate, so the proportion searching

begins to fall after the first few months. African males are much less likely to find jobs, with the proportion searching remaining around 20% over the first six months out of school. The proportion of coloured men searching for work is always lower than the proportion of African men searching for work, a reflection of the greater success that coloured men have in finding jobs.

The bottom panel shows the proportion of active labor force participants, the sum of the proportion currently working and the proportion searching. The curves are roughly parallel for African and coloured males for the first 24 months, with the coloured curve about 15 percentage points higher in every month. The African curve rises at a slightly more rapid rate than the coloured curve in the third year. This is primarily a reflection of a more rapid increase in search among African men, although it also partly due to a more rapid increase in employment among African men. An interesting feature of this graph is that following a sharp increase in participation in the first month after leaving school, there is a slow but steady increase in labor force participation during the next 36 months. By 36 months after leaving school about 80% of both African and coloured men are working or searching for work.

Figure 3 shows the monthly labor force transitions for women. The proportion of women working is lower than the proportion of men working in every month after leaving school. Coloured women also show a larger discrepancy than coloured men between the proportion currently working and the proportion who have ever worked. This suggests that women have more movement in and out of the labor force. Coloured women have a sharper increase in job search after leaving school than African women, and coloured women are considerably more successful in finding jobs. The bottom panel of Figure 3 shows the same kind of parallel patterns for coloured and African women that was observed for men in Figure 2, with coloured participation about 15-20 percentage points higher than African participation for the

first two years out of school. As with men, there is a convergence in participation rates in the third year out of school. This is partly driven by a decline in participation among coloured women after month 28, a decline that coincides with increasing participation by African women.

## 4. Modeling transitions to work

CAPS has a rich set of information about young people and their households that can be used to analyze the determinants of early labor market success. In this section we present the results of probit regressions in which we analyze the probability of being employed in each month after leaving school. The analysis is based on the same monthly work histories used to construct Figures 2 and 3. Table 6 presents summary statistics for the dependent and independent variables in the regressions. The sample consists of all CAPS young adult respondents who were out of school from zero to 48 months, with an observation corresponding to one person-month. The total number of individuals contribution person-months is 1,944, a little under half of the original CAPS sample. The total number of person-months observed is 41,983. The dependent variable equals one if the respondent was working in a month and zero if the respondent was not working, whether or not the respondent was searching for work. As suggested by the previous results in this paper, the mean of the "currently working" variable differs dramatically across racial groups, with a mean of 0.29 for Africans, 0.52 for coloureds, and 0.70 for whites. Large differences in schooling are also evident, with 36% of Africans having passed matric compared to 44% of coloureds and 68% of whites.

One interesting feature of CAPS is the literacy and numeracy evaluation (LNE) that was administered to all respondents in Wave 1. This was about a 20 minute self-administered written test with 45 questions covering basic reading and mathematics skills. Respondents could choose to take the test in English or Afrikaans. There was no version in Xhosa, the

home language of most African respondents. The English test was taken by 99% of African respondents, 43% of coloured respondents, and 64% of white respondents. Although most Africans took the test in a second language, it is worth noting that English is the official language of instruction in African schools and is used for many tests such as the grade 12 matriculation exam. English language skills are also likely to pay off in job search. We use the LNE scores as a measure of cumulative learning at the time of the 2002 interview. Performance on the test reflects a combination of many factors, including innate ability, home environment, and the quantity and quality of schooling to that point. The LNE scores in Table 5, which have been standardized to a mean of zero and standard deviation of one, show enormous racial differences in test scores. The mean score for Africans is 0.7 standard deviations below the mean for coloureds and over 1.5 standard deviations below the mean score for whites. As shown in Lam, Ardington, and Leibbrandt (2007), the LNE scores for Africans and whites barely overlap.

Looking at another key variable in Table 6 that will be included in our regressions, the variable "poor health in 2005" indicates that the respondent reported that they were in poor or fair health in 2005 (other choices were good, very good, or excellent). We see that 7% of Africans reported having fair or poor health, compared to 4% of coloureds and 2% of whites. Since the sample was aged 17-25 in 2005, the 7% figure for Africans is relatively high. This may reflect the impact of HIV/AIDS, although the evidence is only indirect. CAPS does not do HIV testing and does not ask directly about HIV status.

***Probit regressions for monthly employment***

Table 7 presents probit regressions analyzing the probability of being employed in each month after leaving school. For each regression, the first column shows the probit coefficients and the second column shows the marginal effects, evaluated at the sample means. Repeated monthly observations are used for each respondent, so the standard errors

are adjusted to account for correlated errors at the individual level. Probit 1 only includes dummies for African and white (coloured is the omitted category), a dummy for male, the number of months since leaving school, and a quadratic in monthly age. Looking at the marginal effects in Column 2, Africans have a 34 percentage point lower probability of working than coloureds, evaluated at the sample means, while whites have a 15 percentage point higher probability of working than coloureds. Males have a 9 percentage point higher probability of working than females. The probability of working rises at an average rate of 0.4 percentage points per month.

Probit 2 adds schooling variables. The schooling variables in the regression indicate the highest grade attained at the time the respondent left school, with schooling Grade 9 or below as the omitted category. The point estimate implies a marginal effect of having completed grade 10 or 11 of 5 percentage points, but it is not statistically significant at conventional levels. There is a large effect of completing grade 12 (when there is a standardized matriculation exam), implying a 16 percentage point increase in the probability of working compared to those with less than grade 10. In contrast to the view sometimes expressed in South Africa, completing secondary school does appear to have a substantial effect on successfully finding a job after leaving school.

Probit 3 adds the score on the literacy and numeracy exam (LNE) administered in 2002. We see that the test score is a strong predictor of early labor force outcomes. A one standard deviation increase in the test score is associated with a 6 percentage point higher probability of working. Controlling for the LNE score considerably reduces the estimated impact of schooling. The estimated marginal effect of completing Grade 12 drops from 16 percentage points in Probit 2 to 10 percentage points in Probit 3. The point estimate for the impact of having Grade 10 or 11 (compared to Grade 9 or less) falls from 0.05 in Probit 2 to 0.01 in Probit 3, and remains statistically insignificant. These results suggest that the labor market

does reward the skills that are captured in the LNE score. The precise mechanism for this is unclear, however. It could indicate that those who get better LNE scores are better motivated and work more effectively at job search. Alternatively, it could mean that employers are somehow able to perceive the greater ability of those with higher test scores, choosing them first out of the pool of new labor force entrants.

Probit 3 also looks at the impact of health on the probability of working. Those who reported being in poor or fair health were 10 percentage points less likely to be working after leaving school compared to those who said they were in good, very good, or excellent health. We cannot be sure of the extent to which this represents the impact of HIV/AIDS, since we do not have direct information on HIV status. The results suggest that poor health does affect the employment of some South African youth, although with only 7% of Africans reporting that their health is fair or poor, health does not appear to play a major role in explaining the low employment rates of African youth.

## 5. Conclusion

This paper looks at the early labor force experience of young people in South Africa using data from the 2001 census and the Cape Area Panel Study (CAPS), a new longitudinal study in metropolitan Cape Town. Census data indicate that young people have difficulty making the transition from school to work, with especially high rates of unemployment among the African population. The situation of Africans in Cape Town is very similar to the situation of Africans in the entire country, as shown in our comparison of census data with CAPS data. CAPS data show that only 25% of African men aged 21-22 were working at the time of the CAPS Wave 1 interview in 2002, and only 37% had ever worked for pay. In contrast, 91% of coloured men and 95% of white men had ever done work for pay in 2002. Racial differences appear even before youth finish school, with white youth much more likely than any other group to work during the years they are enrolled in school. Among men aged

16-17, the percentage who had ever done any work in CAPS Wave 1 was only 7% for Africans, 38% for coloureds, and 50% for whites.

Using CAPS to look at month-by-month transitions from school to work, we see that coloured youth are much more likely to be working during the last four months before leaving school than are African youth. Both groups experience a sharp jump in labor force participation immediately after leaving school. Coloured youth are much more likely to find jobs, however, resulting in a quick decline in the percentage searching for work. African men have a slow but steady increase in the percentage working during the first three years after leaving school, but still lag well behind coloureds. By the 36th month after leaving school, about 50% of African men are working, compared to 70% of coloured men. African women also lag well behind coloured women in finding work after leaving school, but begin to close the gap after three years.

Our probit regressions provide strong evidence about the importance of schooling and ability in early labor market outcomes. We estimate significant effects of schooling on the probability of being employed during the first 4 years after leaving school. Those who leave school with Grade 12 or higher are 16 percentage points more likely to find work than those who leave school with less than Grade 10. When we include the results of the literacy and numeracy test that was administered to CAPS respondents in 2002, we estimate a large impact of the test score on the probability of finding work. Including the LNE score cuts the estimated impact of completing Grade 12 to 10 percentage points, implying that a large part of the apparent impact of schooling is captured by our measure of ability. This may indicate that employers do not use schooling alone as a signal, but are also able to discriminate on the basis of ability. These scores do not provide a direct measure of ability in the sense that the LNE scores themselves are driven by a mix of ability, schooling and life experience up to the time that the test was taken in 2002 (Lam, Ardington and Leibbrandt, 2007). Thus, although

the inclusion of this variable in the regression cuts the direct impact of completed schooling, embodied in this variable is a longer-run legacy of disadvantaged schooling. In particular, the large racial differences in the LNE scores may reflect large differences in school quality, differences that may be contributing to the large racial differences in early labor market success.

## References


Anderson, K.G, A. Case and D. Lam (2001). Causes and consequences of schooling outcomes in South Africa: Evidence from survey data. *Social Dynamics* 27(1): 37-59.

Dinkelman, T (2004). How household context affects search outcomes of the unemployed in KwaZulu-Natal, South Africa: A panel data analysis. *South African Journal of Economics,* 72:3.

Everatt, D and E. Sisulu (1992). Black youth in crisis, Ravan Press, Braamfontein.

International Labour Office (2004). Key Indicators of the labour market. International Labour Office database.

Kingdon, Geeta and Knight, John (2000). Are searching and non-searching unemployment distinct states when unemployment is high? The case of South Africa. Centre for the Study of African Economies, University of Oxford.

Lam, David, Cally Ardington and Murray Leibbrandt (2007) Schooling as a Lottery: Racial Differences in Schooling Advancement in Urban South Africa. ERSA Working Paper No. 56. July.

Lam, David, Murray Leibbrandt and Cecil Mlatsheni (2008) Education and Youth Unemployment. SALDRU Working Paper, UCT.

Lam, David, Jeremy Seekings and Meredith Sparks (2006) The Cape Area Panel Study: Overview and Technical Documentation for Waves 1-2-3. University of Cape Town, December 2006.

Mhone, G.C.Z (2000). Promoting Youth Employment in South Africa, NIEP Occasional Paper Series No. 19, February.

Mlatsheni, C and S. Rospabe (2002). Why is youth unemployment so high and unequally spread in South Africa? DPRU Working Paper No. 02/65.

Standing, G., Sender, J. and J. Weeks (1996). *Restructuring the labour market: the South African challenge*. An ILO Country Review. International Labour Office, Geneva.

Truscott, K, (1993) Youth education and work: The need for an integrated policy and action approach. CASE, University of Witwatersrand.

Wittenberg M. and C. Pearce (1996). "Youth unemployment: Some perspectives from the South African Living Standards and Development Survey", in L. Chisholm et al., *Out-of-School Youth Report: Policy and Provision for Out-of-School and Out-of-Work Youth*, Education Policy Unit, University of the Witwatersrand, 1996.

Van Zyl Slabbert, F (1994). Youth in the new South Africa, HSRC Press, Pretoria.

The World Bank (2006). World development Report 2007: Development and the next generation.

## Table 1. Population Percentages of Youth Aged 14-22, Cape Town versus the Rest of South Africa

| Population Group | Cape Town | Rest of South Africa | | Total South Africa |
|---|---|---|---|---|
| | | Urban | All | |
| Black African | 35 | 74 | 85 | 82 |
| Coloured | 49 | 10 | 6 | 8 |
| Indian or Asian | 2 | 5 | 2 | 2 |
| White | 14 | 12 | 7 | 7 |
| | | | | |
| Total | 100 | 100 | 100 | 100 |

Source: 10% Microsample of the 2001 Census

## Table 2. Levels of Education of 14-22 Year Olds, Cape Town and the Rest of South Africa

| Education Level | Cape Town | Rest of South Africa | |
|---|---|---|---|
| | | All | Urban |
| No schooling | 1.4% | 4.0% | 2.1% |
| Some primary | 9.4% | 17.1% | 11.9% |
| Complete primary | 9.5% | 11.3% | 9.5% |
| Some secondary | 55.0% | 51.7% | 53.1% |
| Grade 12 / Std 10 | 21.5% | 13.9% | 20.2% |
| Higher | 3.2% | 2.0% | 3.2% |
| | | | |
| Total | 100% | 100% | 100% |

Source: 10% Microsample of the 2001 Census

## Table 3. Employment Status of 15-22 Year-Old Youth in Cape Town and the Rest of South Africa, 2001 census

| Employment Status | Cape Town | | | | Rest of the Country | |
|---|---|---|---|---|---|---|
| | African | Coloured | White | Total | All | Urban |
| Employed | 10% | 23% | 26% | 19% | 8% | 10% |
| Unemployed | 28% | 22% | 4% | 21% | 17% | 21% |
| Scholar or student | 52% | 43% | 65% | 49% | 59% | 57% |
| Home-maker or housewife | 1% | 2% | 1% | 1% | 1% | 1% |
| Pensioner or retired | 0% | 0% | 0% | 0% | 0% | 0% |
| Unable to work | 1% | 1% | 1% | 1% | 1% | 1% |
| Seasonal worker not working | 0% | 1% | 0% | 1% | 1% | 1% |
| Does not choose to work | 3% | 4% | 2% | 3% | 6% | 5% |
| Could not find work | 5% | 5% | 1% | 4% | 7% | 5% |
| | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% |

Source: 10% Microsample of the 2001 Census

Note: This table covers ages 15-22 because employment status is captured for those 15 years and older in the 2001 census.

**Table 4. Percentage enrolled and grade attainment, Cape Area Panel Study Wave 1, 2002**

| | Age 16-17 in Wave 1 | | | | Age 21-22 in Wave 1 | | | |
|---|---|---|---|---|---|---|---|---|
| Population group | N | Currently enrolled (%) | Mean number of grades completed | Two or more grades behind (%) | N | Currently enrolled (%) | Mean number of grades completed | Passed matric (%) |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| African female | 287 | 86.2 | 8.51 | 31.6 | 249 | 27.5 | 10.43 | 36.0 |
| African male | 190 | 89.0 | 7.86 | 49.3 | 199 | 30.7 | 10.12 | 34.2 |
| Coloured female | 283 | 79.5 | 9.14 | 15.4 | 206 | 14.2 | 10.75 | 53.5 |
| Coloured male | 254 | 72.9 | 8.71 | 27.2 | 138 | 14.6 | 10.47 | 44.7 |
| White female | 71 | 99.2 | 9.70 | 0.9 | 70 | 63.4 | 12.81 | 98.9 |
| White male | 74 | 95.3 | 9.63 | 7.5 | 41 | 72.1 | 12.62 | 87.9 |
| Total | 1159 | 82.9 | 8.88 | 22.8 | 903 | 28.9 | 10.92 | 53.7 |

**Table 5. Percentage currently working, worked in last 12 months, and ever worked, Cape Area Panel Study Wave 1, 2002**

| | Age 16-17 in Wave 1 | | | | Age 21-22 in Wave 1 | | | |
|---|---|---|---|---|---|---|---|---|
| Population group | N | Currently working (%) | Worked in last 12 months (%) | Ever worked (%) | N | Currently working (%) | Worked in last 12 months (%) | Ever worked (%) |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| African female | 287 | 0.4 | 1.4 | 1.4 | 248 | 13.2 | 21.8 | 26.2 |
| African male | 190 | 3.2 | 5.0 | 7.1 | 198 | 25.5 | 31.6 | 37.1 |
| Coloured female | 283 | 11.2 | 20.8 | 28.5 | 205 | 50.9 | 70.3 | 84.2 |
| Coloured male | 254 | 14.2 | 27.2 | 38.1 | 138 | 62.5 | 80.0 | 90.9 |
| White female | 71 | 20.8 | 50.5 | 54.5 | 70 | 59.5 | 77.3 | 93.7 |
| White male | 73 | 27.3 | 41.4 | 50.1 | 41 | 63.0 | 89.6 | 95.6 |
| Total | 1158 | 11.9 | 22.3 | 28.9 | 900 | 45.8 | 61.6 | 71.7 |

**Table 6. Descriptive statistics for variables in probit regressions, CAPS respondents out of school 0-48 months, 2002-2006**

| Variable | African | Coloured | White | Total |
|---|---|---|---|---|
| Currently working | 0.29 (0.45) | 0.52 (0.50) | 0.70 (0.46) | 0.48 (0.50) |
| Male | 0.47 (0.50) | 0.47 (0.50) | 0.51 (0.50) | 0.48 (0.50) |
| Grade 10 or 11 | 0.36 (0.48) | 0.28 (0.45) | 0.23 (0.42) | 0.29 (0.45) |
| Grade 12 or higher | 0.36 (0.48) | 0.44 (0.50) | 0.68 (0.47) | 0.45 (0.50) |
| Literacy and numeracy score | -0.45 (0.86) | 0.22 (0.80) | 1.14 (0.64) | 0.16 (0.92) |
| Poor health in 2005 | 0.07 (0.25) | 0.04 (0.20) | 0.02 (0.15) | 0.05 (0.21) |
| Months since leaving school | 14.1 (10.3) | 15.5 (11.0) | 13.4 (10.0) | 14.9 (10.7) |
| Age in months | 21.3 (2.1) | 20.1 (2.1) | 20.9 (2.2) | 20.5 (2.2) |
| Age in months squared | 458.7 (90.1) | 408.4 (86.1) | 441.5 (94.1) | 425.1 (90.6) |
| Number of individuals | 861 | 910 | 173 | 1,944 |
| Number of person-months | 17,394 | 21,506 | 3,083 | 41,983 |

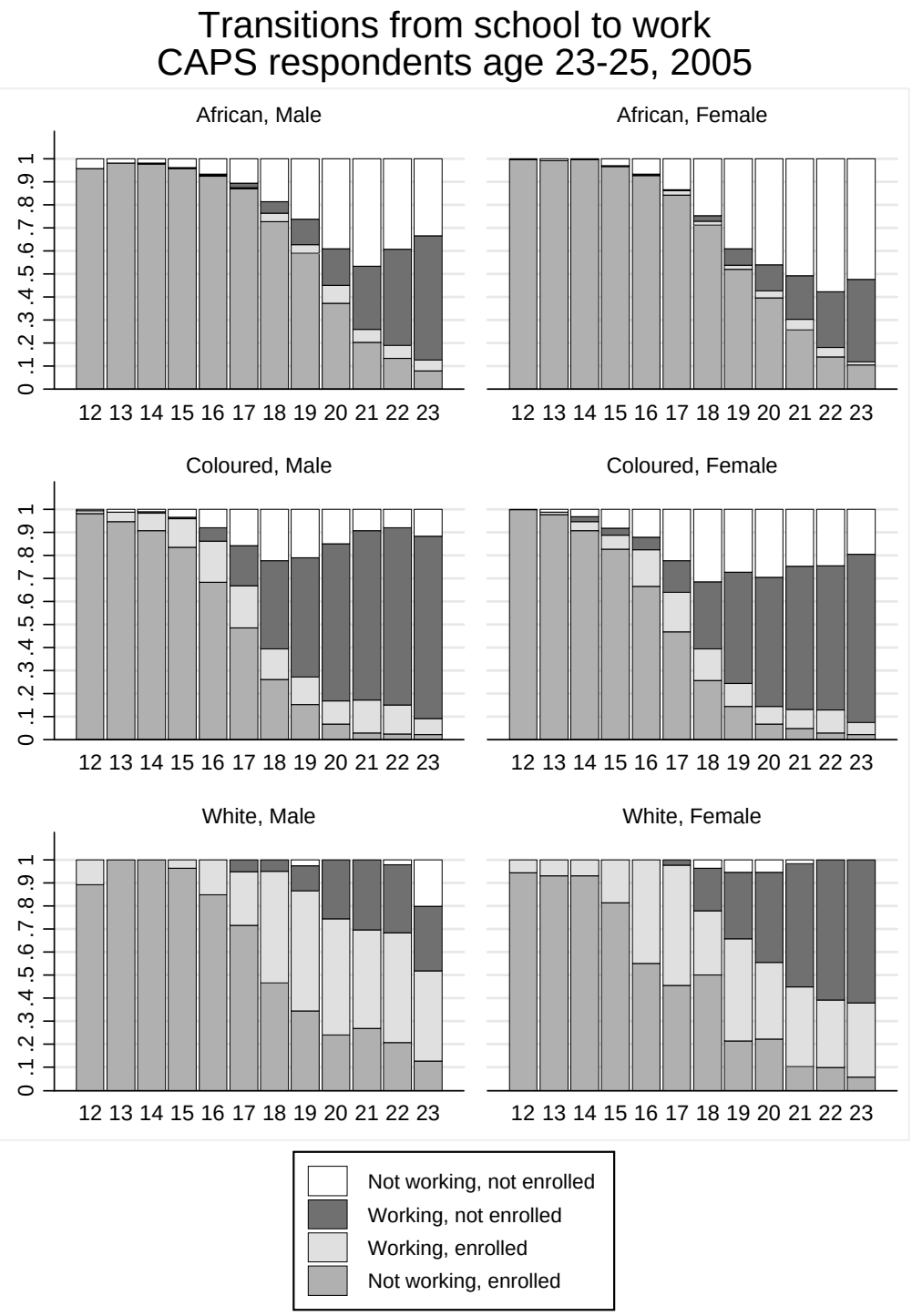
*Note: Standard deviation in parentheses; descriptive statistics use sample weights*

**Table 7. Probit regressions for working in months after leaving school, Cape Area Panel Study**

| Variable | Probit 1 | | Probit 2 | | Probit 3 | |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| African | -0.911*** | -0.337*** | -0.836*** | -0.313*** | -0.733*** | -0.278*** |
| | [0.058] | [0.019] | [0.059] | [0.020] | [0.064] | [0.023] |
| White | 0.365*** | 0.145*** | 0.314*** | 0.125*** | 0.202* | 0.0804* |
| | [0.11] | [0.043] | [0.12] | [0.045] | [0.12] | [0.047] |
| Male | 0.225*** | 0.0895*** | 0.242*** | 0.0959*** | 0.216*** | 0.0857*** |
| | [0.053] | [0.021] | [0.055] | [0.022] | [0.055] | [0.022] |
| Months since leaving school | 0.010*** | 0.0038*** | 0.014*** | 0.006*** | 0.014*** | 0.006*** |
| | [0.002] | [0.001] | [0.002] | [0.001] | [0.002] | [0.001] |
| Age in months | 0.823*** | 0.328*** | 0.554*** | 0.221*** | 0.542*** | 0.216*** |
| | [0.18] | [0.072] | [0.19] | [0.075] | [0.19] | [0.074] |
| Age squared | -0.015*** | -0.006*** | -0.01** | -0.004** | -0.009** | -0.004** |
| | [0.004] | [0.002] | [0.005] | [0.002] | [0.004] | [0.002] |
| Grade 10 or 11 | | | 0.116 | 0.0462 | 0.0331 | 0.0132 |
| | | | [0.082] | [0.033] | [0.083] | [0.033] |
| Grade 12 or higher | | | 0.406*** | 0.161*** | 0.263*** | 0.105*** |
| | | | [0.085] | [0.033] | [0.090] | [0.035] |
| Literacy and numeracy score | | | | | 0.152*** | 0.0607*** |
| | | | | | [0.039] | [0.016] |
| Poor health in 2005 | | | | | -0.265** | -0.104** |
| | | | | | [0.12] | [0.047] |
| Constant | -10.74*** | | -7.812*** | | -7.598*** | |
| | [1.89] | | [1.95] | | [1.93] | |
| Observations (person-months) | 41,983 | | 41,983 | | 41,983 | |

Notes: Robust standard errors adjusting for repeated observations per individual in brackets
Marginal effects evaluated at means in parentheses.
* significant at 10%; ** significant at 5%; *** significant at 1%
Omitted categories: Coloured, Grade 9 or less.

Figure 1.




Note: Working and enrolled refer to any time during year.

Figure 2. Work and job search by months since left school
Males out of school at least 36 months

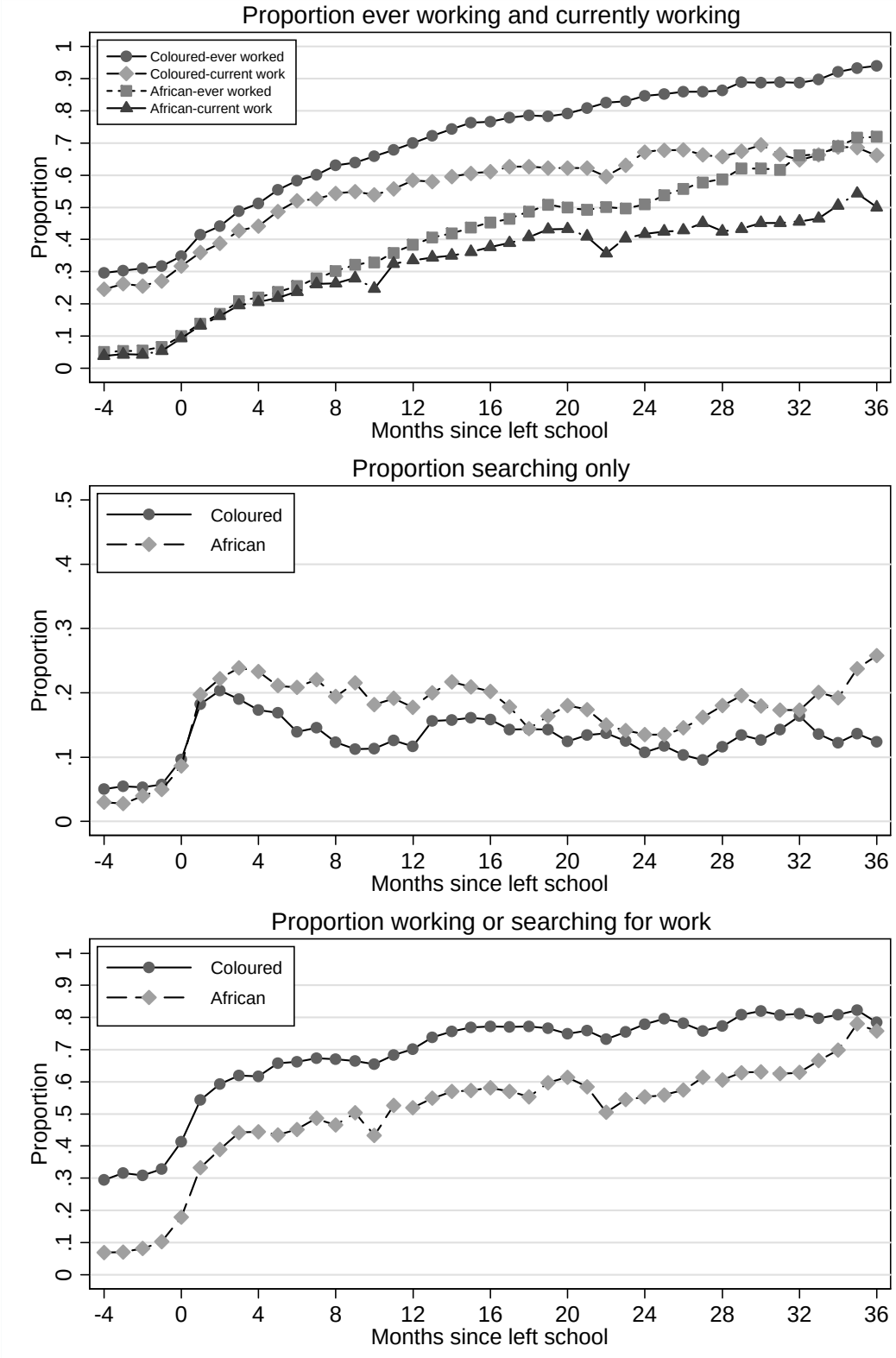
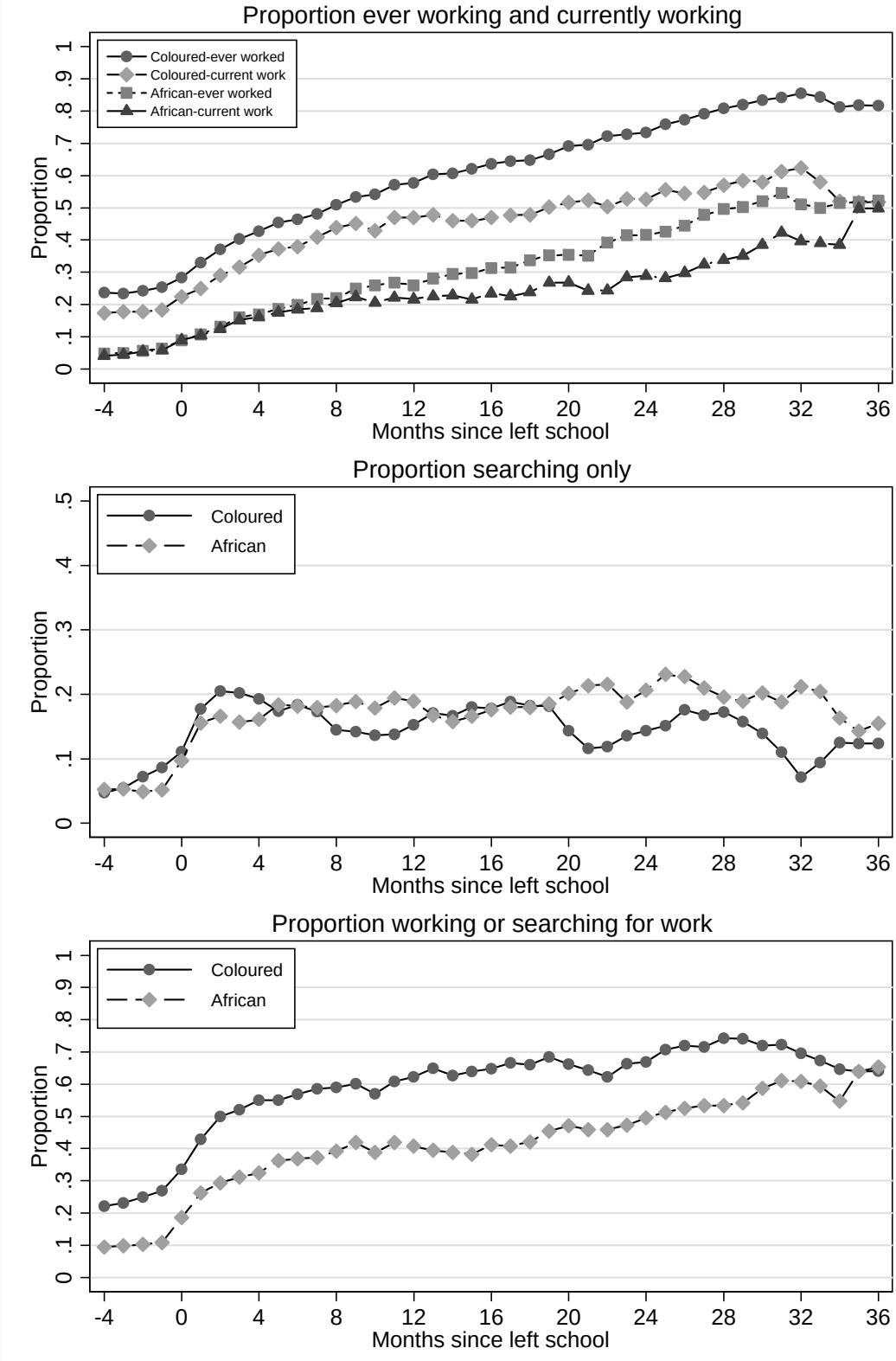


Figure 3. Work and job search by months since left school
Females out of school at least 36 months



# The Southern Africa Labour and Development Research Unit

The Southern Africa Labour and Development Research Unit (SALDRU) conducts research directed at improving the well-being of South Africa's poor. It was established in 1975. Over the next two decades the unit's research played a central role in documenting the human costs of apartheid. Key projects from this period included the Farm Labour Conference (1976), the Economics of Health Care Conference (1978), and the Second Carnegie Enquiry into Poverty and Development in South Africa (1983-86). At the urging of the African National Congress, from 1992-1994 SALDRU and the World Bank coordinated the Project for Statistics on Living Standards and Development (PSLSD). This project provide baseline data for the implementation of post-apartheid socio-economic policies through South Africa's first non-racial national sample survey.

In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. In line with its historical contribution, SALDRU's researchers continue to conduct research detailing changing patterns of well-being in South Africa and assessing the impact of government policy on the poor. Current research work falls into the following research themes: post-apartheid poverty; employment and migration dynamics; family support structures in an era of rapid social change; public works and public infrastructure programmes, financial strategies of the poor; common property resources and the poor. Key survey projects include the Langeberg Integrated Family Survey (1999), the Khayelitsha/Mitchell's Plain Survey (2000), the ongoing Cape Area Panel Study (2001-) and the Financial Diaries Project.

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