

Profiling South African Middle Class Households: 1998-2006

Mosidi S. Nhlapo
Statistics South Africa
mosidin@statssa.gov.za

Barbara A. Anderson
University of Michigan
barba@umich.edu

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Note: The paper for PAA would also include an analysis of whether managerial and professional jobs were in the public or the private sector. We are in the process of getting this variable.

Abstract

This paper identifies a set of aspects of material standard of living that are used to define a middle class standard of living for South African households. They are: residing in formal housing, having a water tap in the residence, having a flush toilet in the residence, having electricity as the main lighting source, having electricity or gas as the main cooking source, and having a landline or a household member having a cell phone. The percent of South African households and of households by population group with each of the components of a middle class standard of living is tracked over time 1998-2006. The percent of all South African households with a middle class standard of living changed little from 1998-2000 to 2004-2006, going from 23% to 26%. About 85% of White households and 75% of Asian households had a middle class standard of living throughout the period. Coloured households with a middle class standard of living rose from 41% in 1998-2006 to 48% in 2004-2006. Almost no rural African households had a middle class standard of living. The percent of urban African households with a middle class standard of living rose from 15% to 22%. Among middle class households, White households were much better off than middle class households from other population groups. In 2006, 73% of White households with a middle class standard of living reported monthly expenditure of more than R2500 (\$313 at 8Rand=\$1), while this was true of only 56% of middle class Asian households, 53% of middle class Coloured households and 32% of middle class African households. The total number of households and the number of households with a middle class standard of living is projected by population group to 2026. Also, the number and the percent of households with a middle class standard of living by population group are projected to the year 2026. By 2006, there were as many African middle class households as White middle class households, and by 2010 a majority of all middle class households are projected to be African. Next the educational distribution of young adults living in a household with a middle class standard of living is shown. At all dates White young adults have the highest educational distribution, and African young adults have a somewhat higher educational distribution than Coloured young adults. Then the percent of African and of White young adults living in households with a middle class standard of living who hold professional or managerial jobs is compared. The contribution of: 1) the group's educational distribution and 2) the group's returns to education (the percent of those with a given educational level who have a professional or managerial job) to the percent of the group holding a managerial or professional job is calculated. White young adults in middle class households are much more likely to hold professional or managerial jobs than are African young adults in middle class households, even after differences between Whites and Africans in educational attainment are taken into account. Differences between Whites and Africans in holding managerial jobs are much greater than for professional jobs. There is no evidence of any trend between 1998 and 2006. Differences by race in the quality of schooling and in choice of specialisation could explain some of this difference. However a White young adult with less than a matric (high school diploma) is more likely to hold a managerial job than is an African young adult with a BA degree or a diploma.

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This study examines households in South Africa with a middle class material standard of living 1998-2006. The main aspects of standard of living examined are the source of drinking water and the type of sanitation used. Lighting source, cooking source, type of housing, and household possession of a telephone are also considered in defining sets of standard of living indicators. This study looks at households with a middle class standard of living for all South African households, as well as for all African households, rural African households, urban African households, Coloured households, Asian households and White households. The number of middle class households is also projected to 2026. In addition, analysis is performed on the education and occupation of young adults age 25-39 who live in a household with a middle class standard of living.

The standard of living that a household experiences is an important aspect of quality of life. Whether a household's drinking water is from a tap in the residence or from a public tap does not matter for household members' health but it has an impact on the household's quality of life. Obtaining drinking water from a public tap can be safe and healthful, but a household whose drinking water is from a public tap definitely is not experiencing a middle class standard of living.

Households in South Africa have a variety of income sources, including wages and salaries, remittances from members who are temporary labour migrants and government grants. The diversity of sources of income of many households presents challenges for income studies. Even when income data are reported, there are still difficulties. In the 2001 South Africa Census, which asked about personal income, for 10% of individuals the income item was missing, and when reported income of persons is aggregated into household income, 25% of households ended up with zero reported total income (Ardlington *et al.*, 2006: 823).

This study identifies households that have a middle class standard of living and examines their characteristics over time. These households are the best candidates for participation in the modern sector of the South African economy, both as producers and as consumers. An increase in the proportion of households in this group is directly related to South African economic growth and the prospects for economic growth in the near future. The growth of such a middle class has also been linked to social, political and economic openness and stability (Moaddel, 1995: 290; Neupert, 1981).

There have been many approaches to defining middle class households. Some have used education or occupation as a defining characteristic, and others have used household possessions, items purchased or income (Black Diamond 1, 2007; International Centre for Policy Studies, 2002; Johnston, 2004; Senauer and Goetz, 2003).

We do not use household possessions to identify households with a middle class standard of living partially because, although some household possessions are asked about in the data sources used, the list is not consistent across surveys taken in different years. Also, whether a household possesses an item, such as a television, reflects not only the purchasing power of that household but also lifestyle preferences and other influences that could have little to do with whether the household is middle class.¹ We also do not use education or occupation of household members to define a middle class standard of living. However, a major part of this study involves examination of the education and occupation of persons who reside in households with a middle class standard of living.

Although there is no general agreement about what the criteria should be for defining a household as middle class (Johnston, 2004), all of the definitions aim at identifying

¹ It is known that consumption patterns of African and of White households in South Africa differ, even for households at the same fairly high income levels. There are various proposed explanations of this difference in consumption patterns, including cultural differences in consumption preferences and consumption differences arising from a generally lower level of assets among African households than among White households with the same expenditure level (Nieftagodien and van der Berg, 2007)

households with a secure living situation without serious concerns about shelter, water and sanitation, and further identifying households that have the potential to contribute to economic growth and participate in modern markets. Our definition of the middle class, using standard of living indicators, incorporates aspects of a secure and desirable living situation.

Data Sources

Our analysis is based on the 1998-1999 October Household Surveys, the 2000-2001 Labour Force Surveys and the 2002-2006 General Household Surveys. These are national representative surveys covering 18,000-30,000 households.

These surveys collected data that refer to persons within each household as well as characteristics of entire households. The definition of whether a household has a middle class standard of living is based on data that refer to a household as a whole, such as the household's main source of drinking water. However, we also examine the characteristics of young adults (age 25-39) residing in households with a middle class standard of living.

Characteristics of a Middle Class Standard of Living

Table 1 shows the characteristics that a household needs to have for it to be classified as having a middle class standard of living.²

Table 1. Definition of a middle class standard of living

Lives in formal housing
Water tap in dwelling
Flush toilet in dwelling
Electricity is main light source
Electricity or gas is main cooking source
Has a landline phone or a household member has a cell phone

Percent of Households with Various Components of a Middle Class Standard of Living

Figures 1-6 show the percent of all South African households and the percent of households for each of the four population groups that possessed each of the components of a middle class standard of living listed in Table 1. In order to have a middle class standard of living, a household needed to possess **all** of the listed components.

As we shall see, almost no rural African households had a middle class standard of living. Also, in 2006, over 90% of White, Asian, and Coloured households resided in urban areas, while only 57% of urban African households resided in urban areas. Thus, results are shown for urban African and rural African households as well as for all African households.

Figure 1 shows the percent of households residing in formal housing over time. A household is considered to reside in formal housing if it lives in any of the following situations: in a formal structure on a separate stand, in a flat in a block of flats, in a townhouse or semi-detached house. In some surveys living in a unit in a retirement village was listed as a separate category. When a retirement unit was listed as an option, it also was considered to be formal housing. In every year White households or Asian households have the highest percent in formal housing, followed by Coloured households, with a lower percent for African households.

² For more discussion and analysis of the definition of middle class standard of living used in this study see Anderson and Nhlapo (2009).

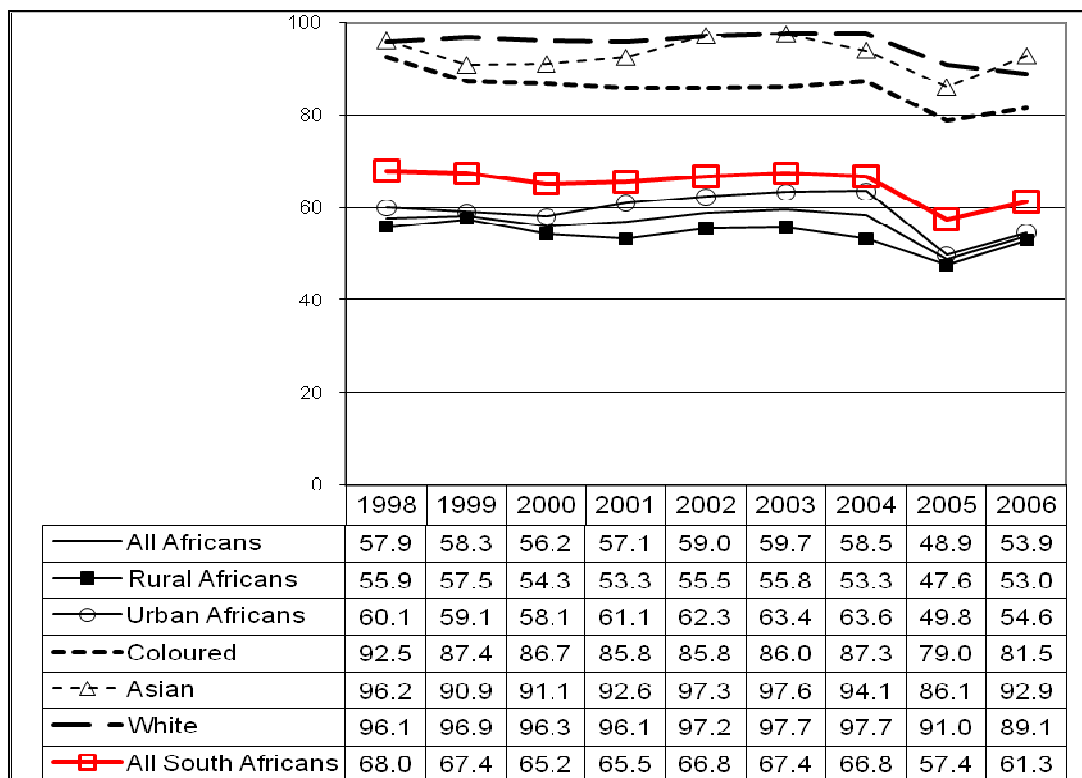


Figure 1. Percent residing in formal housing

There was little change over time for any group in the percent residing in formal housing. Thus, although residence in formal housing is a reasonable component of a middle class standard of living, there were no changes in this characteristic which would have pushed the percent of households with a middle class standard of living up or down.

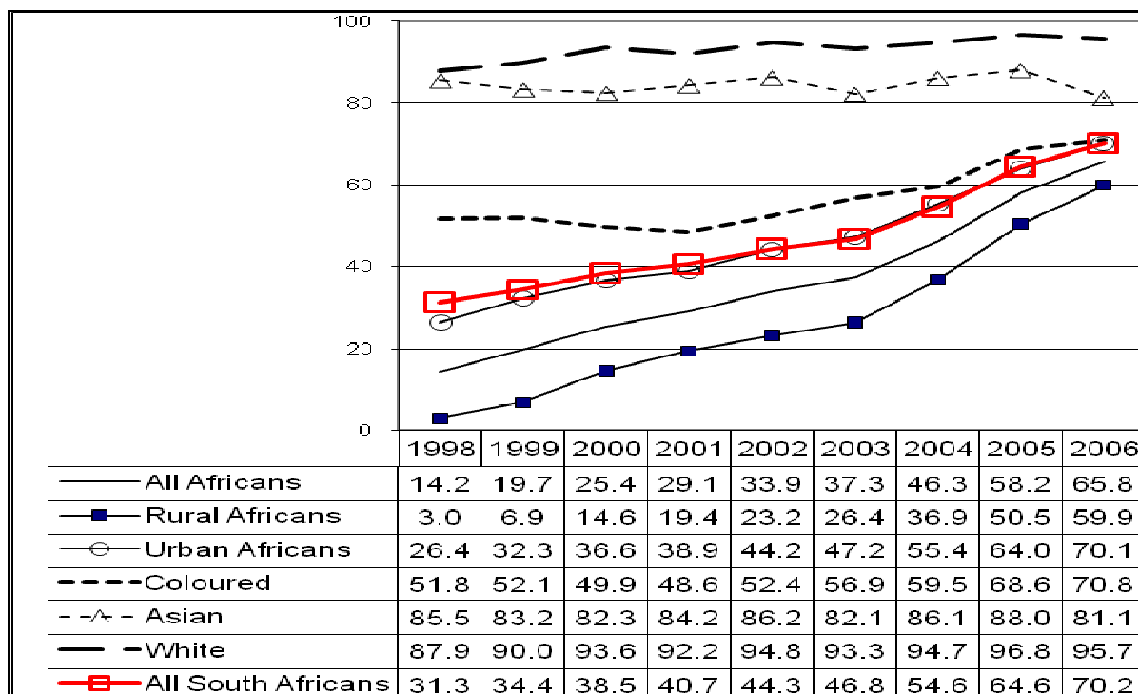


Figure 2. Percent with a landline in dwelling or a household member with a cell phone

Figure 2 shows the percent of households which had a landline phone or in which a household member had a cell phone. For every group except Asian households, there was a substantial increase over time. This increase was especially large for Coloured households and was even larger for African households.

Figure 3 shows the percent of households in which electricity is the main lighting source. This percent has risen considerably for all groups except for White households and Asian households, for whom over 98% of households used electricity as the main lighting source at all dates.

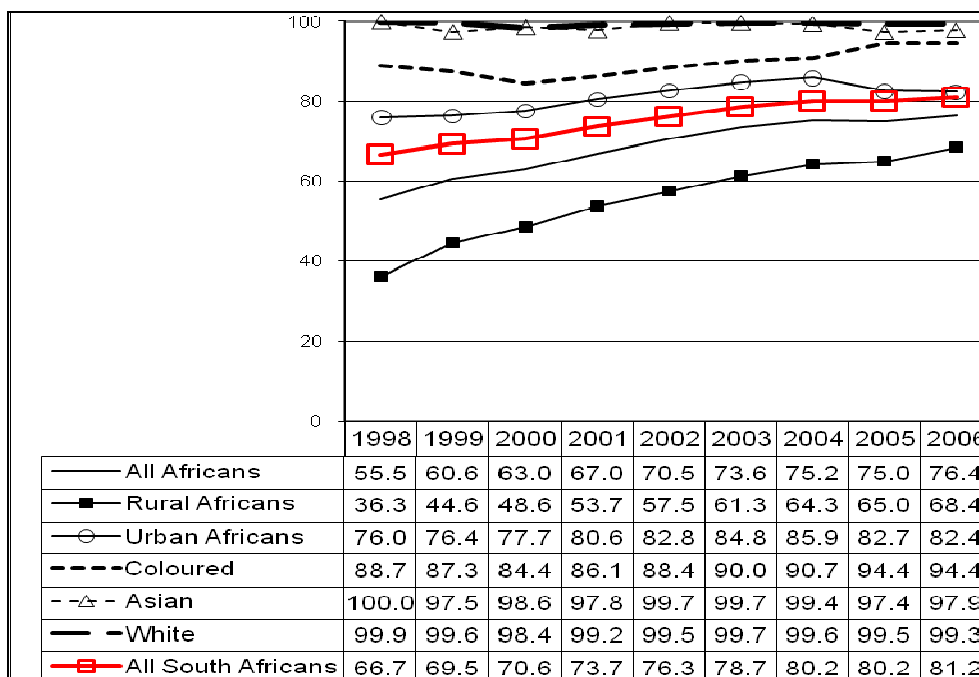


Figure 3. Percent with electricity as the main lighting source

Figure 4 shows the percent of households in which electricity or gas was the main cooking source. This was true for virtually all White households and all Asian households at every date, but there was a large increase for African households.

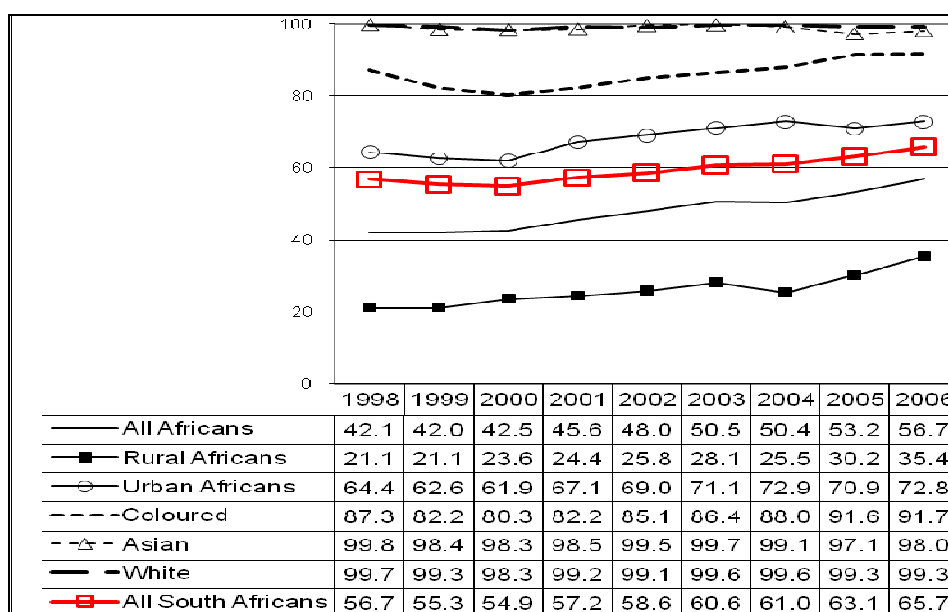


Figure 4. Percent with electricity or gas as main cooking source

Figure 5 shows the percent of households with a tap in the dwelling. There was little change over time for any group. Although in 2006 84% of urban African households obtained their drinking water from a tap, this was usually not a tap in the dwelling -- 44% of urban African households had a tap on site, and 40% of urban African households had a tap in the dwelling.

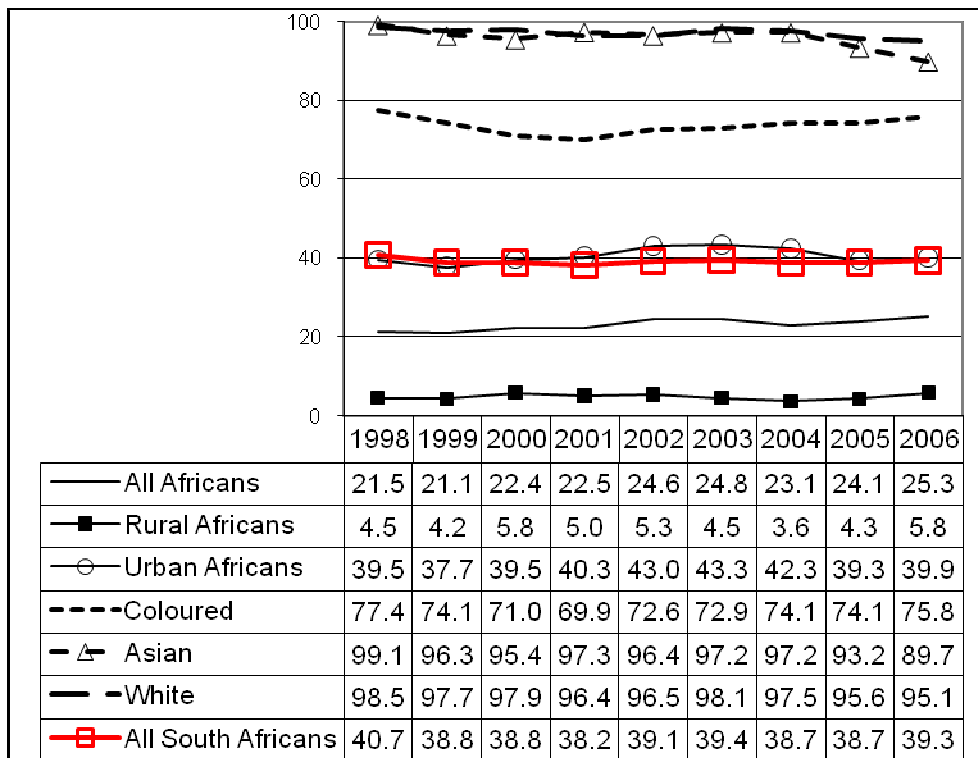


Figure 5. Percent of households with water tap in dwelling

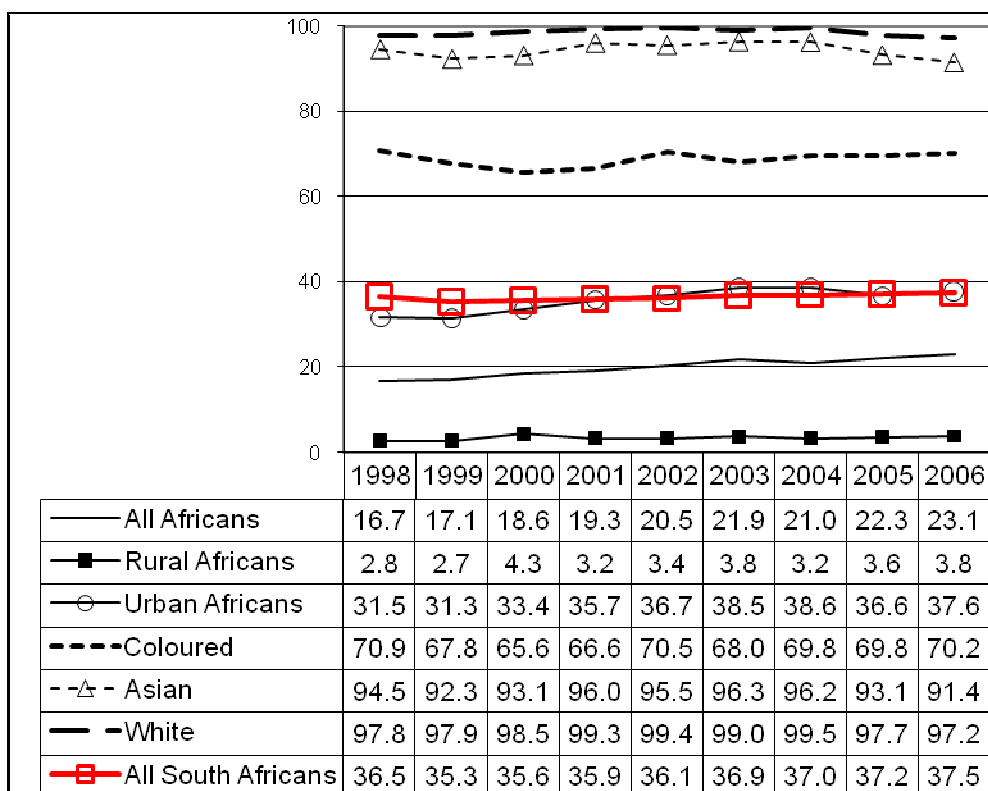


Figure 6. Percent of households with flush toilet in dwelling

Figure 6 shows the percent of households with a flush toilet in the dwelling. Although in 2006 37% of urban African households had a flush toilet in the dwelling or outside onsite, the flush toilet was as often outside onsite as in the dwelling.

Figure 7 shows the percent of households with a middle class standard of living for each population group. To smooth out year-to-year variations, means for three-year periods (1998-2000, 2001-2003, and 2004-2006) are shown. The increase over time for Coloured households and for urban African households is clear. However, there was virtually no

change for White households or Asian households in the percent with a middle class standard of living.³

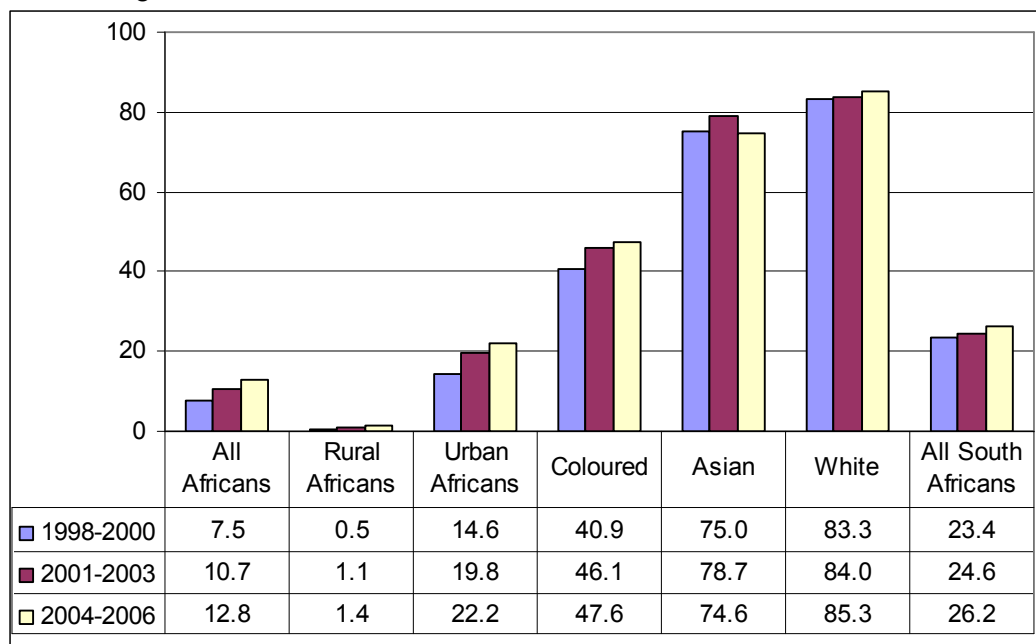


Figure 7. Percent of households with a middle class standard of living

Despite the increase in the percent of urban African households with a middle class standard of living shown in Figure 7, not all middle class households experience the same economic situation. Figure 8 shows the percent of middle class households for whom in 2006 the monthly household expenditures exceeded R2500 and the percent whose monthly household expenditure exceeded R5000 in 2006.⁴ This is not shown for rural Africans, for whom less than 2% of households had a middle class standard of living in 2006.

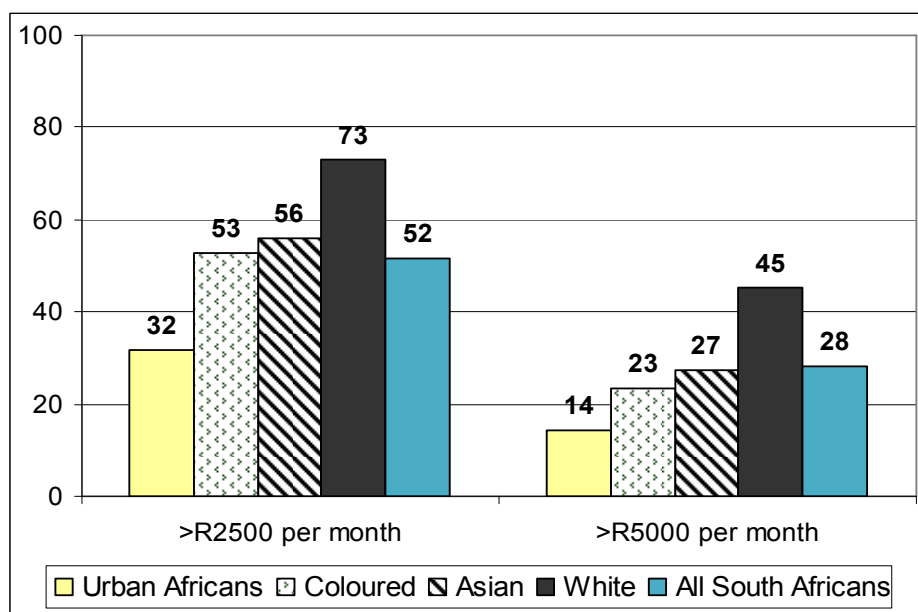


Figure 8. Percent of households with a middle class SOL with monthly expenditure greater than R2500 and greater than R5000, 2006

³ There are substantial year-to-year fluctuations especially for the estimates for Asian households. Each survey included 400-500 Asian households.

⁴ The Labour Force Survey 2001 and the General Household Surveys in 2002 and later asked a question about total household expenditures in the previous month. This was coded in eight categories, with less than R400 as the lowest category and R10,000+ as the highest category. This is a rough indicator of monthly household income or monthly household consumption.

The monthly household expenditure of middle class White households is much more likely to be above R2500 and to be above R5000 than for Asian middle class households, middle class Coloured or middle class urban African households. Among middle class households, Asian households tend to have the second highest monthly expenditures, followed by Coloured households.

Projections of the Percent of Households with a Middle Class Standard of Living

We project the total number of households and the number of households with a middle class standard of living by population group through the year 2026. The percent of households with a middle class standard of living is obtained by dividing the number of middle class households by the total number of households. The percent of each population group and of all South African households with a middle class standard of living is shown in Figure 9, and the number of households with a middle class standard of living by population group is shown in Figure 10.⁵

As shown in Figure 9, White households are estimated to always have the highest percent with a middle class standard of living, reaching 93% in 2026. In 2026, 65% of Africa households are estimated to have a middle class standard of living. After 2016, the percent of African households with a middle class standard of living is estimated to rise rapidly.

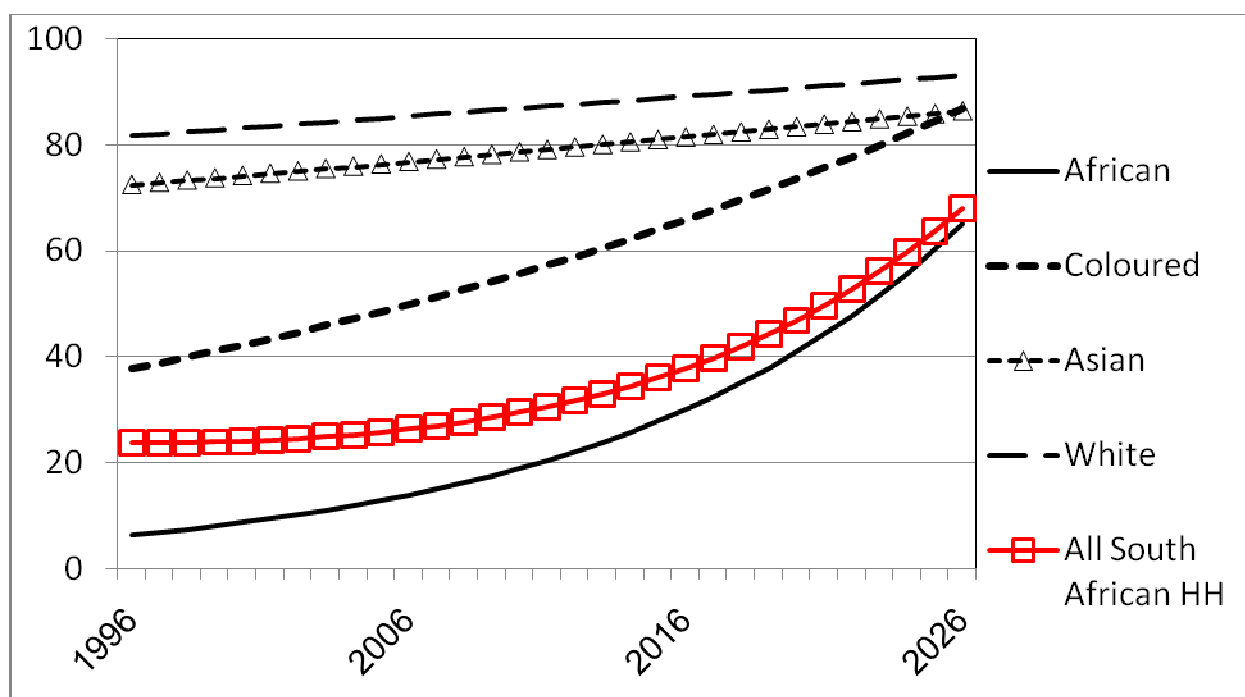


Figure 9. Projected per cent of households with a middle class standard of living (estimated 1996-2006 and projected 2007-2026)

Figure 10 shows the projected number of middle class households by population group. Increasingly, the number of middle class households is dominated by the number of African middle class households. This is both because the growth rate of African households is higher than of other population groups and because, as shown in Figure 9, the percent of African households with a middle class standard of living increases over time.

⁵ Appendix 2 explains how the projections were done.

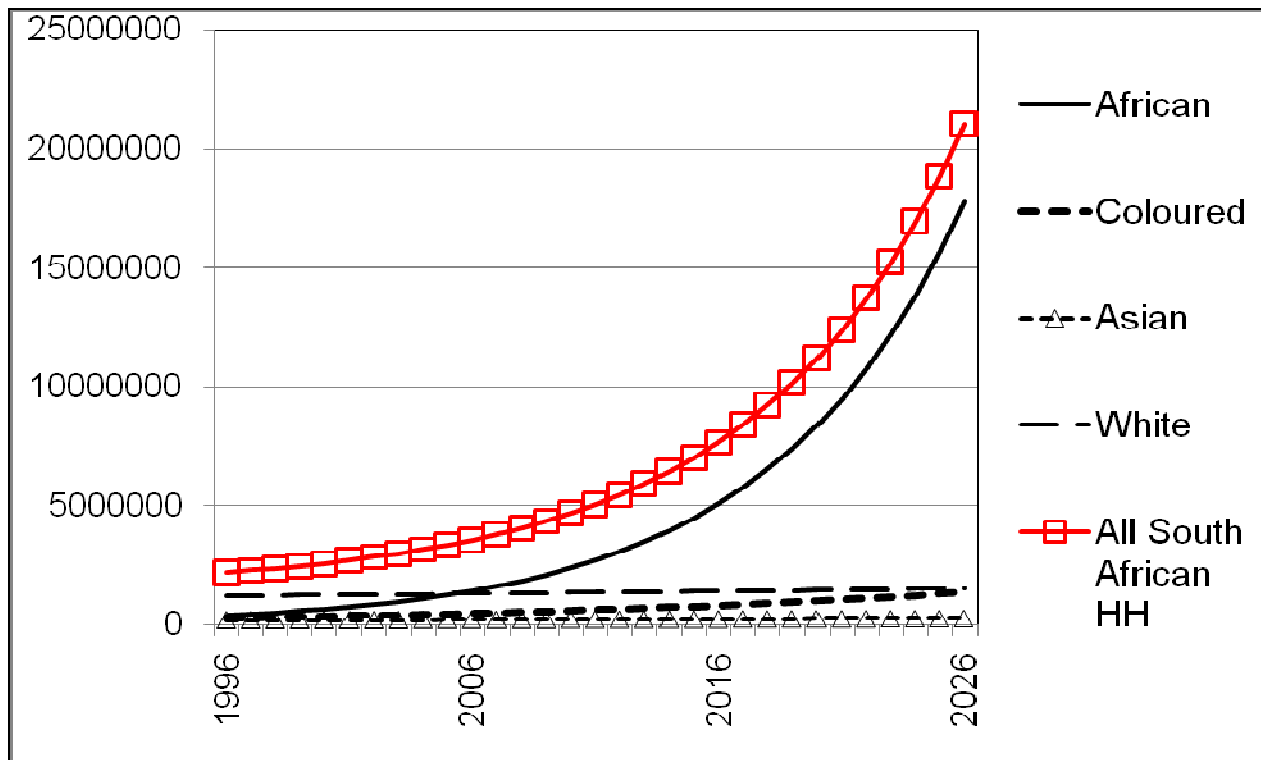


Figure 10. Projected number of households with a middle class standard of living (estimated 1996-2006 and projected 2007-2026)

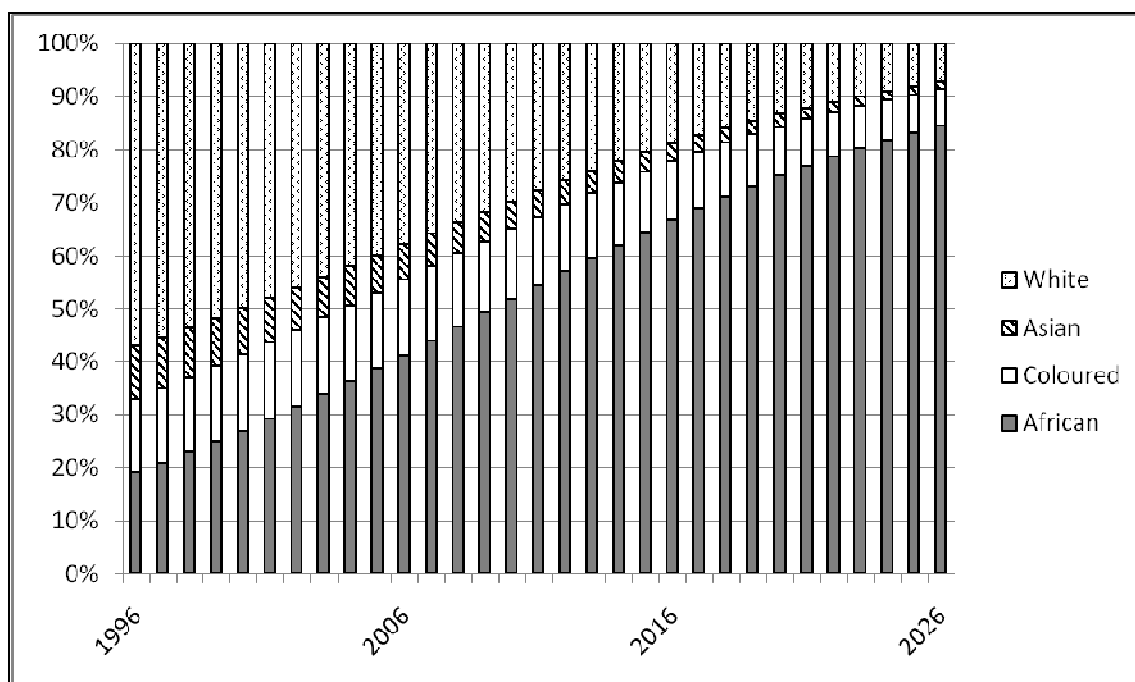


Figure 11. Percent distribution of all households with a middle class standard of living across population groups (estimated 1996-2006 and projected 2007-2026)

Figure 11 shows the percent distribution over time by population group of all households with a middle class standard of living. The percent of all middle class households comprised by Africans is estimated to increase rapidly. By 2006, the number of African households with a middle class standard of living exceeded the number of White households with a middle class standard of living, and it is estimated that by 2010 more than ½ of all households with a middle class standard of living will be African households. This numerical dominance of African households among all households with a middle class standard of living is consistent with the conclusion by Seekings and Natrass (2005:306) that

between 1995 and 2000 the percent of the top income decile obtained by those who were African or Coloured increased from 22% to 34-40%.

Education of Young Adults (Age 25-39) in Households with a Middle Class Standard of Living

We did not use educational or occupational characteristics of members of households to define whether the household had a middle class standard of living. However, we will examine the educational and occupational characteristics of young adults (age 25-39) who lived in households with a middle class standard of living. These young adults in middle class households have the most advantaged living arrangements. They likely attended higher quality schools than those from less advantaged situations and have the best prospects for obtaining desirable jobs.

Figures 12-14 show the educational distribution of young adults in middle class households by population group in 1998-2000, 2001-2003 and 2004-2006.⁶ White and Asian young adults have the highest educational attainment but Africans have higher educational attainment than Coloureds. Since almost all African households with a middle class standard of living reside in urban places, and since urban residence for Africans has been fairly recent, African households could have required more resources, including human capital, to attain a middle class standard of living than Coloured households.

There was fairly little change over time in the educational attainment of young adults in middle class households within each population group. We saw in Figure 9 that the percent of households with a middle class standard of living increased over time for every population group, and it increased especially rapidly for African households. Thus, in 1998-2000, African households with a middle class standard of living were more severely selected from all African households than was true somewhat later. As shown in Figure 7, from 1998-2000 to 2004-2006, the percent of African households with a middle class standard of living rose from 8% to 13%.

The high degree of selectivity is probably why we see little change in the educational distribution by population group, even though overall educational attainment was increasing between the late 1990's and the mid-2000's. For African young adults age 25-39 in a middle class household, 29% had a BA/Diploma or higher in both 1998-2000 and in 2004-2006. In 1999, for all Africans age 25-39, 7% had a BA/Diploma or higher, and by 2005, this had risen to 10%. The selectivity of being in a middle class household is clear for African young adults. For White young adults the situation is different. For White young adults age 25-39 in a middle class household, 44% had a BA/Diploma or higher in 1998-2000 and 37% in 2004-2006. In 1999, for all Whites age 25-39, 33% had a BA/Diploma or higher, and by 2005, this had risen to 36%, barely lower than the value for White young adults in middle class households. Of course, in 2004-2006, 85% of White households had a middle class standard of living.

There is another way to look at whether there was any substantial change over time in the difference between the educational distribution of African young adults and of White young adults in middle class households. The index of dissimilarity (Siegel, Swanson and Siegel, 2004: 118-120) is the percent of persons in one group who would have to move across categories to obtain the same distribution across those categories as persons from another group. There was little change in the percent of Africans who would need to shift across educational categories to obtain the educational distribution of Whites – in 1998-2000 19% would need to shift across educational categories, in 2001-2003 16% and in 2004-2006 17%.

⁶ The coding of educational categories is shown in Appendix 3.

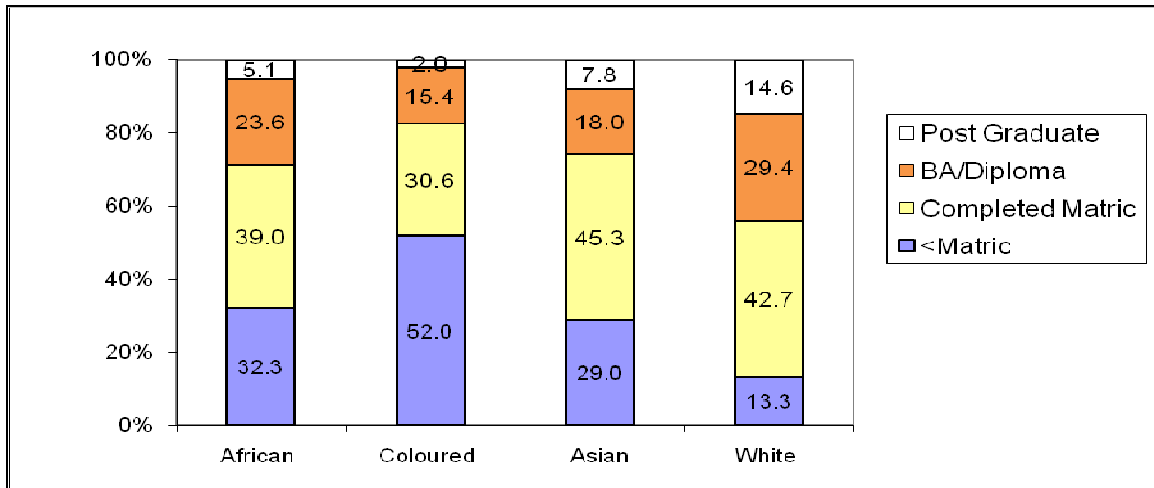


Figure 12. Educational distribution of young adults in households with a middle class standard of living by population group, 1998-2000

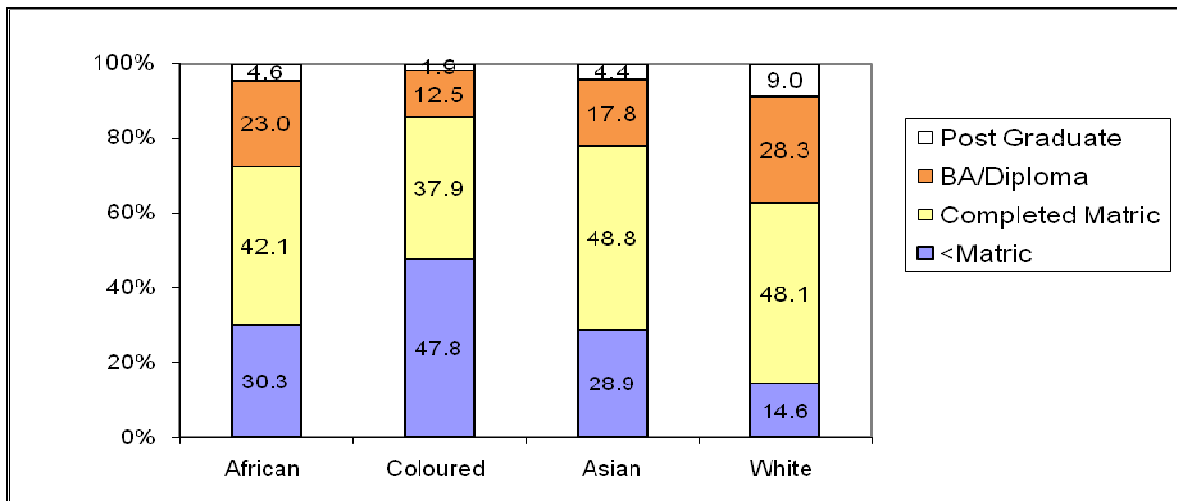


Figure 13. Educational distribution of young adults in households with a middle class standard of living by population group, 2001-2003

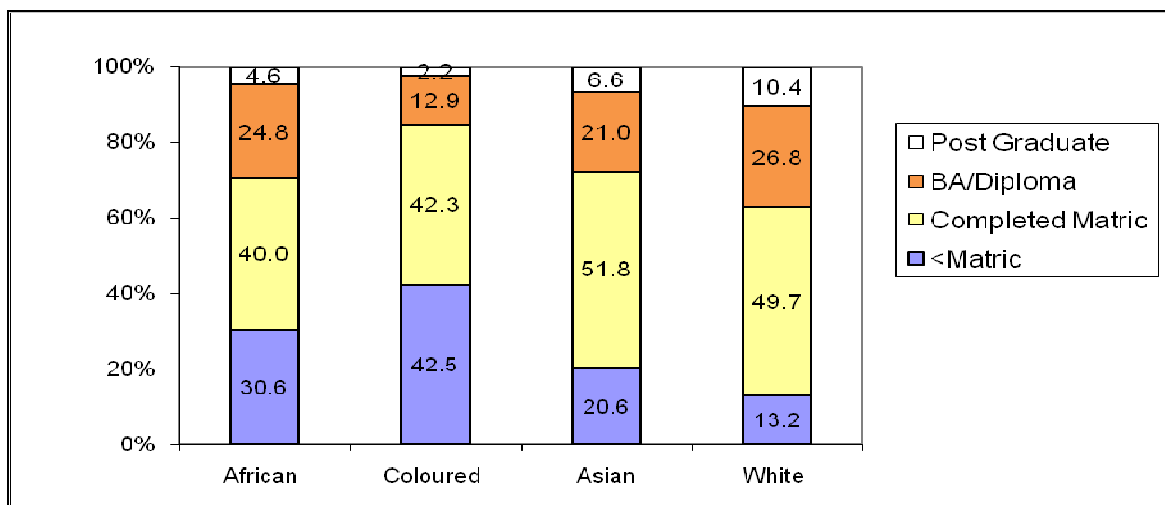


Figure 14. Educational distribution of young adults in households with a middle class standard of living by population group, 2004-2006

The finding of higher educational attainment for African young adults than for Coloured young adults is consistent with Cosser's (2009: 51) finding that among those in Grade 12 in 2005, 27% of Coloured youth but 20% of African youth planned to be working

after one year. The remainder planned either to be at a higher educational institution or to be travelling in preparation for higher education. Cosser (2009: xi) reports a similar finding comparing Coloured and African educational aspirations for those in grade 12 in 2001.

The Chance that White and African Young Adults (Age 25-39) in Households with a Middle Class Standard of Living Hold a Professional or Managerial Job

Managerial and professional jobs are considered the most desirable occupations (Sarason, 1977). The traditional definition of a manager is as the one who oversees the work of others, or is “the person responsible for planning and directing the work of a group of individuals, monitoring their work, and taking corrective action when necessary” (Reh, 2009). Thus a manager needs to be able to effectively supervise other people. A manager also needs to exercise judgment, and the manager’s supervisors need to have confidence in the manager’s judgment and to give the manager the benefit of the doubt in making decisions. A professional job requires “a high degree of generalized and systematic knowledge,” and usually a high level of education. For a professional, because of the specialised knowledge involved, the quality of the performance of the work is seen as best evaluated by people in the same occupation. Thus a professional is expected to have specific competencies (Barber, 1963: 672).

In this section we look at the percent of White and of African young adults in middle class households who hold professional or managerial jobs. Young adults from middle class households would be likely to have a better chance of obtaining managerial or professional jobs than members of the same race who came from less advantaged circumstances. We also look at the percent within each educational category who hold these desirable jobs.

There has been great interest in the development of a Black middle class (c.f. Southall, 2004). Equal opportunity programmes have been developed to improve the employment situation of Africans and other non-Whites (c.f., Bowmaker-Falconer, *et al.* 1997). Often the issue of improving the employment situation of African and increasing their representation in high level jobs has been viewed as “managing diversity” (c.f., Horwitz, 1996), an approach that has been criticised (Human, 1996). Looking at factors related to whether African and White young adults who have a secure material standard of living hold managerial and professional jobs and whether the situation has changed over time is one way to see how far things have moved in the recent past.

One would expect that the higher a person’s educational attainment, the greater that person’s chance of obtaining a professional or managerial job. Thus, since as shown in Figures 12-14, since White young adults in middle class households had a higher educational attainment distribution than African young adults in middle class households, a higher percentage of White young adults than African young adults would be expected to have professional or managerial jobs.

Figure 15 shows the percent of young adults in middle class households who had professional or managerial jobs.⁷ As expected, in every three-year period, a higher percent of White than of African young adults from middle class households held such jobs. Among those from middle class households a White young adult was always more than twice as likely to hold a managerial or a professional job as an African young adult. There is very little change over time in the percent with professional or managerial jobs for either African or for White young adults.

⁷ The following Statistics South Africa occupational codes were used for classification of people as working in a managerial or a professional job:

Managers: Code 01: occupation codes 1000-1999 (Managers)

Professionals: Code 02: occupation codes 2000-2999 (Professionals)

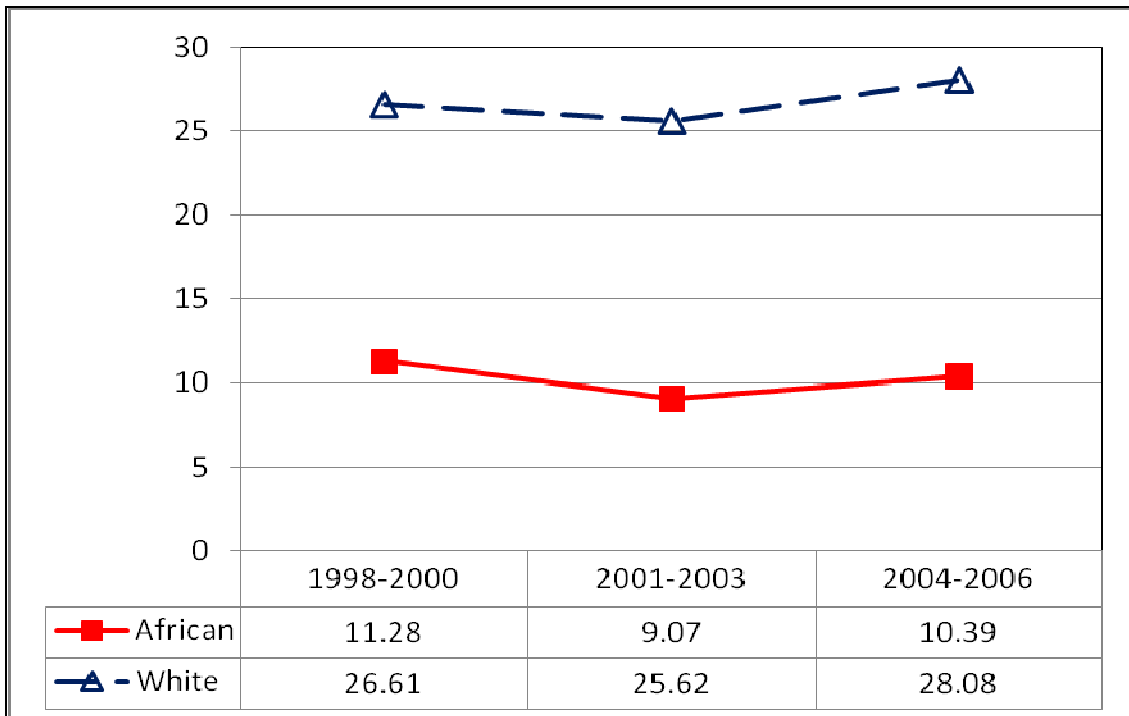


Figure 15. Percent of White and of African young adults in middle class households with professional or managerial jobs, 1998-2000, 2001-2003 and 2004-2006

African and White young adults from middle class households differ in educational attainment, which certainly affects the chance of obtaining a desirable job. However it also is important to look at the chance that a member of a given population group with a given educational attainment has a desirable job. This can be viewed as the returns to education (or the returns to a particular educational attainment) for members of a particular population group.

Figures 16-18 show the percent of young adults living in middle class households who held professional or managerial jobs by educational attainment and by whether the young adult was White or African. These figures also show how these returns to education by racial group changed over time. If education were the most important qualification for a job, one would hope that the same educational attainment would lead to the same chance of obtaining a desirable job. One would also hope that over time differences by race in returns to education would narrow.⁸

For both Africans and Whites, in every three-year period, the higher a young adult's educational attainment, the greater the chance that the person held a managerial or professional job. Also in every period, a White young adult with a given level of education had a greater chance of holding a managerial or professional job than did an African young adult with the same level of education.

These differences by education between racial groups are especially pronounced at lower educational attainment levels. In every period, a White young adult with less than a matric had a greater chance of holding a managerial or professional job than did an African young adult with a completed matric.

⁸ In Figure 16, for both Whites and Africans, the proportion with managerial or professional jobs among those with post graduate education is far lower than seen in Figure 17. This is mainly due to the very low proportion of those with post graduate education with both managerial jobs and with professional jobs in 1998. We are not certain that the value for 1998 is accurate. Averaging over three years lessens the effect of the value for 1998. For this reason, we do not concentrate on the change from 1998-2000 to 2001-2003 or on the change in the returns to education for those with post graduate education.

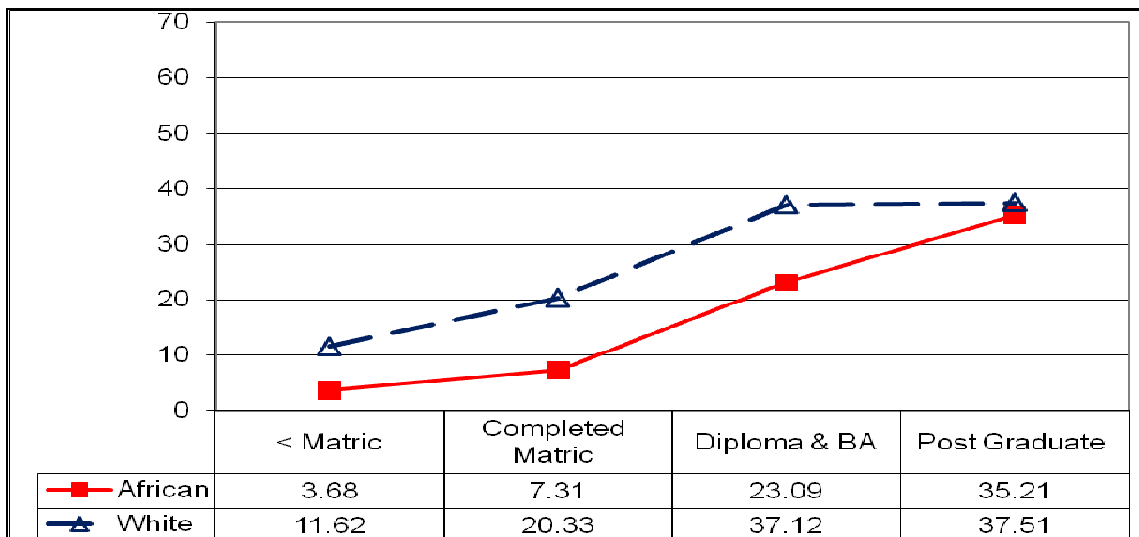


Figure 16. Percent of White and of African young adults in middle class households with professional or managerial jobs by educational attainment (returns to education), 1998-2000

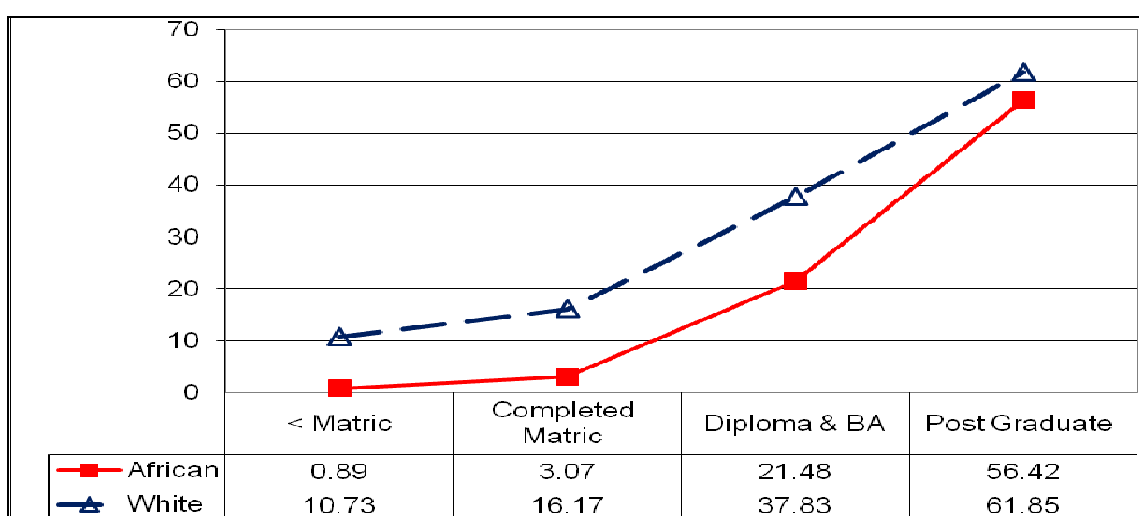


Figure 17. Percent of White and of African young adults in middle class households with professional or managerial jobs by educational attainment (returns to education), 2001-2003

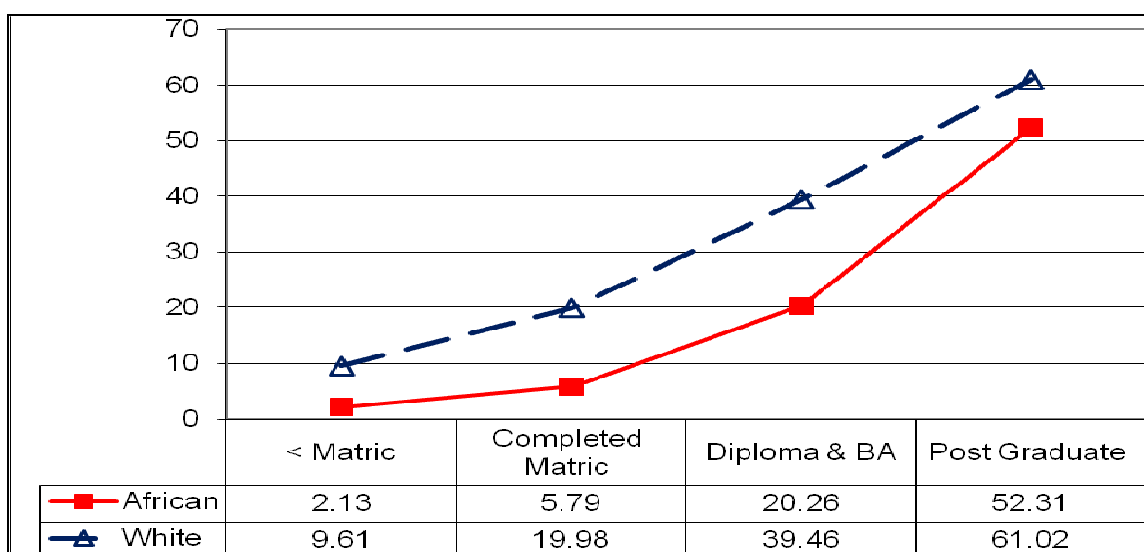


Figure 18. Percent of White and of African young adults in middle class households with professional or managerial jobs by educational attainment (returns to education), 2004-2006

Table 2 shows how a group's educational distribution and a group's returns to education come together to result in a given percent of a group having a professional or managerial job. The calculation for White young adults 2004-2006 is shown as an example.

Table 2. Calculation of percent with professional or managerial jobs: White young adults 2004-2006 as an example

Educational Level	Educational Distribution	Returns to Education (Percent with a Professional or Managerial Job for each Educational Level)	Percent with a Professional or Managerial Job
(1)	(2)	(3)	(4)
			(2)*(3)
<Matric	.132	9.6%	1.3%
Completed Matric	.297	20.0%	9.9%
Diploma & BA	.268	39.5%	10.6%
Post Graduate	.104	61.0%	6.3%
	Sum = 1.000		Sum = 28.1%

Figure 19 presents the results of a standardisation (Preston *et al.* 2001: 21-23) which separates the effects of: 1) the educational distribution of a group and 2) the proportion of young adults at each level of education who obtain a certain outcome, on the overall proportion of the group who obtain hold a professional or managerial job. Thus, it shows the results of calculations for each period of what percent of young adults in households with a middle class standard of living would have managerial or professional jobs if: 1) the group had the educational distribution of white young adults but the returns to education of African young adults, and if: 2) the group had the educational distribution of African young adults but the returns to education of White young adults.⁹

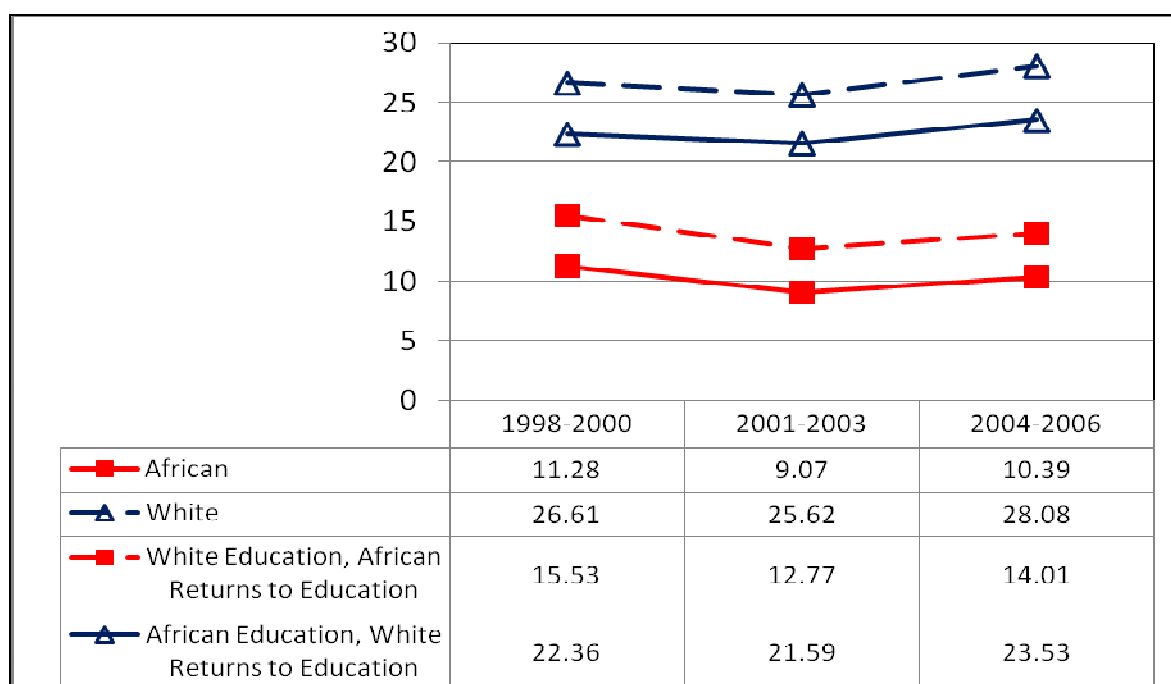


Figure 19. Percent of White and of African young adults in middle class households with professional or managerial jobs: actual percentages and percentages with various educational distributions and various returns to education, 1998-2000, 2001-2003 and 2004-2006

⁹ The calculation of the percent with a professional or managerial job based on 1) the educational distribution of the group and 2) the percent at each educational level with a professional or managerial job is analogous to the calculation of the crude death rate from 1) the age distribution of the population and 2) the age-specific death rates. The educational distribution plays the role of the age distribution and the returns to education play the role of the age-specific death rates.

In Figure 19, the top line, with a dashed blue line and hollow triangles as markers, shows the actual percent with professional or managerial jobs among White young adults. That is the same as what is shown for Whites in Figure 15. Similarly, the bottom line, with a solid red line and solid squares as markers, shows the actual percent with professional or managerial jobs among African young adults, as shown in Figure 15. The two lines in the middle show the effects of varying the educational distribution and of varying the returns to education. The second line from the bottom, with a red dashed line and solid squares, shows the percent with a professional or managerial job that would occur if the group had the educational distribution of Whites but the returns to education of Africans. The second line from the top, with a solid blue line and hollow triangles as markers, shows what percent of a group would have a professional or managerial job if the group had the educational distribution of Africans but the returns to education of Whites. Another way to look at Figure 19 is that if a group had the White educational distribution, the line was dashed, while if the group had the African educational distribution, the line was solid. If the group had White returns to education, the line was blue, and hollow triangles were the marker. If the group had African returns to education, the line was red, and solid squares were the marker.

If differences in educational attainment were the only reason why White young adults were more likely to have professional or managerial jobs than African young adults, then the calculation using White educational attainment and African returns to education should result in the same proportion with professional or managerial jobs as the proportion of Whites with professional or managerial jobs. This is not the case.

It is clear that the greater chance that a White young adult in a household with a middle class standard of living has a professional or managerial job than an African young adult with the **same** educational attainment is the main reason for the higher percent of White than African young adults in middle class households with a professional or managerial job. That is, differences in returns to education between Whites and Africans explain more of the difference between Whites and Africans in the percent holding these jobs than do differences in educational attainment between Whites and Africans.

In 1998-2000, if Africans had the White educational distribution but African returns to education, only 28% of the gap between young adult Africans and young adult Whites would have been eliminated; in 1998-2000 if young Africans had their own educational distribution but White returns to education, 72% of the gap would have been eliminated. By 2004-2006, if Africans had the White educational distribution but their own returns to education, 20% of the gap would have been eliminated, but if Africans had their own educational distribution but White returns to education, 74% of the gap would have been eliminated. Thus, there was virtually no change over time in the role of the educational distribution and of returns to education in explaining the difference between the percent of Africans and of Whites with professional or managerial jobs.

What are the possible causes of the persistent difference between Whites and Africans in the returns to education in holding a professional or managerial job? One possible cause is that even if a young White adult and a young African adult have the same educational attainment, the quality of the education that the White young adult obtained usually was better than the education that the African young adult obtained. A second possibility is that fields of specialisation differ in the availability of managerial and professional jobs. If African young people tended to concentrate in fields with fewer managerial and professional possibilities than White young people, this would contribute to a smaller percent of African than White young adults holding professional or managerial jobs. A third possibility is that there could be qualifications for a professional or managerial job that are not captured by educational attainment. A fourth possibility is that White jobseekers could have more access than African jobseekers to social networks and connections that facilitate obtaining professional or managerial jobs. A fifth explanation is discrimination against African jobseekers – prospective employers of professionals or managers could be more reluctant to hire and retain an African than a White applicant.

This analysis does not take differences between White and African young adults in quality of schooling or in field of specialisation into account, nor does it investigate the other possible explanations. However, it is worthwhile to point out these other possible influences on obtaining a managerial or professional job.

Differences in the quality of education obtained by Africans and Whites remain a persistent problem in South Africa. Restricting our analysis to those living in households with a middle class standard of living should reduce differences between young adult Africans and Whites in quality of schooling, but it probably would not eliminate the difference.

There is extensive literature that shows that in general the quality of education obtained by White South Africans is higher than that obtained by African South Africans. Using data collected in 2000, van der Berg (2006) found persistent large differences in educational quality among South African schools according to the population group composition of the students attending the schools.

Chamberlain and van der Berg (2002) looked at the contribution of differences in quality of schooling obtained by Africans and Whites to differences in earnings for 1995. Without taking educational quality into account, they estimated that 42% of the earnings gap between Africans and Whites was due to racial discrimination. After taking differences in educational quality into account, as indicated by the literacy and numeracy scores on the 1993 Living Standards and Development Survey (SALDRU, 1994), the estimated contribution of racial discrimination to the earnings gap was reduced to 24% (Chamberlain and van der Berg, 2002: 24).

Looking at factors related to unemployment in South Africa 1993-1994, Kingdon and Knight (2001) found that 40% of the difference between the unemployment rate of Africans and Whites could be explained by educational and other characteristics, such as age, gender, and province of residence that might reasonably be related to the probability of unemployment. However, 40% of the difference between White and African unemployment was not explained by the characteristics of the person included in the analysis. The authors attributed this unexplained residual to the quality of education, discrimination, or other characteristics not included in their analysis.

Bhorat (2004), looking at unemployment rates in 1995 and in 2002, noted that among those with tertiary education, Africans were more than 4 times as likely to be unemployed as Whites in 1995 and more than 5 times as likely to be unemployed as Whites in 2002. Also, in 1995, African managers had wages 42% of White managers, and African professionals had wages 35% of those paid to White professionals.

Moleke (2005) analyzed the results of a tracer study 1999-2000 of South Africans who graduated from university between 1990 and 1998. She found that the waiting time between graduation and employment differed by field of study, with those with degrees in engineering or medical sciences have little or no wait and those in education or law having a longer wait. Africans tended to be more concentrated than Whites in the fields with a longer waiting time. However, within the same field of study, White graduates tended to find employment more rapidly than did African graduates. Those who graduated from historically White universities also tended to have a shorter waiting time to employment than did graduates of historically Black universities.

It is possible that there are social skills obtained while growing up that those with a more privileged background obtain from their home setting that are useful in professional jobs, and perhaps more so, managerial jobs. Restricting our consideration to households with a middle class standard of living should narrow this difference in socialisation, but it might not eliminate it. Cosser with Sehlola (2009) found in South Africa that for those in Grade 12 in 2005, one year later 40% of those with jobs obtained those jobs through relatives or personal contacts.

Fernandez (1975) found for the United States that that among White managers, many thought there were social skills apart from educational attainment that were important for the successful manager. In a study in the United States of the rating of the promotion potential of professional and managerial employees by the manager supervising the employee, Landau (1995) found that African-Americans were rated significantly lower on promotion potential even when a variety of employee characteristics, including age, education, salary and organisational tenure, were taken into account.

Also in the United States, Pager (2003: 958) using an audit study found that in applying for an entry-level job, a White applicant with a criminal record was more likely to be offered a call-back for an actual job interview than was an African-American applicant without a criminal record.

In order to hold a managerial or professional job, it is necessary not only to be hired into the job but to continue to hold a managerial or professional job. In the United States, in a study of African-American and White managerial/administrative and professional/technical workers, Wilson and McBrier (2005) found that African-Americans in these jobs were more likely to be laid off than Whites and that individual characteristics that should guard against lay-off, such as advanced education, were much less protective of jobs for African-Americans than for Whites.

The social environment and support within the organization can also be important. Igbaria and Wormley (1992) found that in the United States, within a management information systems firm, African- American managers and professionals “perceived less discretion and autonomy on their jobs than whites” (Igbara and Wormley: 1992: 521), received less career support from their supervisors than white employees, and reported that their job expectations were met less often than reported by White employees. African-American managers and professionals also reported a lower feeling of acceptance within the organization than did White managers and professionals.

So far we have looked at managerial and professional jobs together. Next we look at these two occupational categories separately. Figure 20 shows the proportion of White young adults and of African young adults in middle class households who held managerial jobs in each of the three time periods. The proportion of White young adults with managerial jobs was far higher than for African young adults, and the gap widened over time. In every period White young adults were more than four times as likely as African young adults to hold a managerial job.

Figure 20 shows the results of the same kind of standardisation shown in Figure 19. If African young adults in middle class households had the same educational distribution as White young adults in middle class households but still had African returns to education, it would have a trivial impact on the percent of African young adults in middle class households who held managerial jobs. Across the three time periods, between 6% and 9% of the difference between Africans and Whites would be eliminated if African young adults had the educational distribution of White young adults.

In Figure 21, we look at the situation for professional jobs. The percent of White young adults with professional jobs was higher than for African young adults, but the gap was far less than for managerial jobs. White young adults were 1.6-2.0 times more likely than African young adults to hold a professional job.

Figure 21 also shows the results of the same kind of standardisation shown in Figures 19 and 20. Across the three time periods, between 47% and 75% of the difference between Africans and Whites would be eliminated if African young adults had the educational distribution of White young adults.

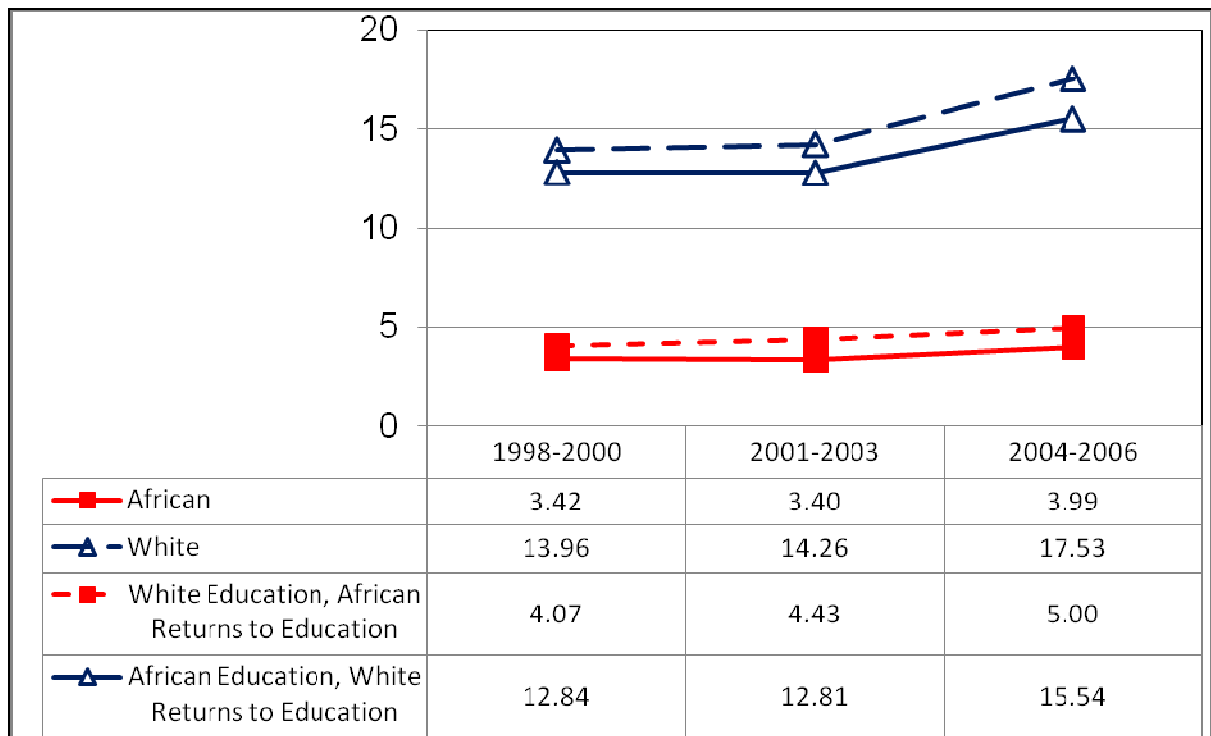


Figure 20. Percent of White and of African young adults in middle class households with managerial jobs: actual percentages and percentages with various educational distributions and various returns to education, 1998-2000, 2001-2003 and 2004-2006

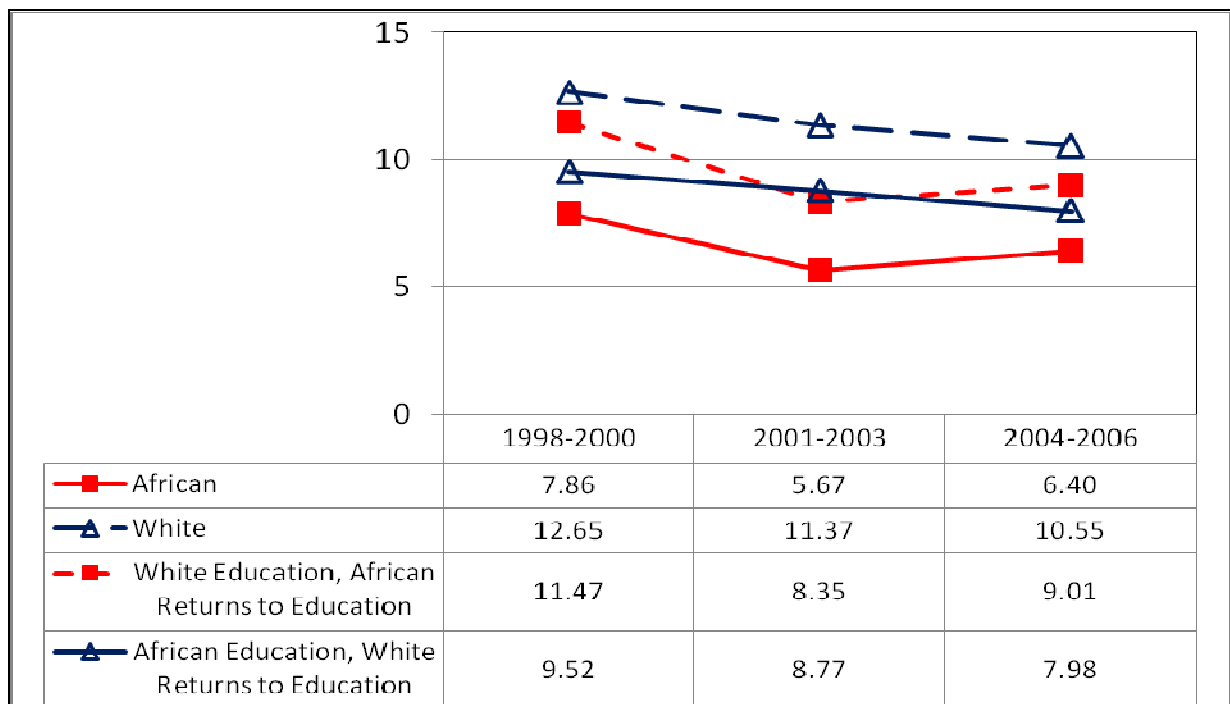


Figure 21. Percent of White and of African young adults in middle class households with professional jobs: actual percentages and percentages with various educational distributions and various returns to education, 1998-2000, 2001-2003 and 2004-2006

The difference in the effects of race on returns to education for: 1) holding a managerial job and 2) holding a professional job is striking. Factors other than educational attainment play a much larger role in whether a young African from a middle class household obtains a managerial job than in whether that person obtains a professional job. In Figures 22 and 23 we look at returns to education by race for 2004-2006. Figure 22 looks at managerial jobs, and Figure 23 looks at professional jobs.

In Figure 22, it is clear that the differences in returns to education between Africans in middle class households and Whites in middle class households in holding a managerial job are very large. Even in 2004-2006, a White young adult in a middle class household with less than matric had a greater chance of holding a managerial job than did a similar young African with a BA degree or a diploma.

Figure 23 shows a very different situation for the returns to education for a professional job. The relative differences between Africans and Whites in Figure 23 are much smaller than in Figure 22. Also, for those with Post Graduate education, Africans and Whites have essentially the same chance of holding a professional job. Also at each educational level shown in Figure 22, Africans have a greater chance of holding a professional job than do Whites at the next lower educational level.

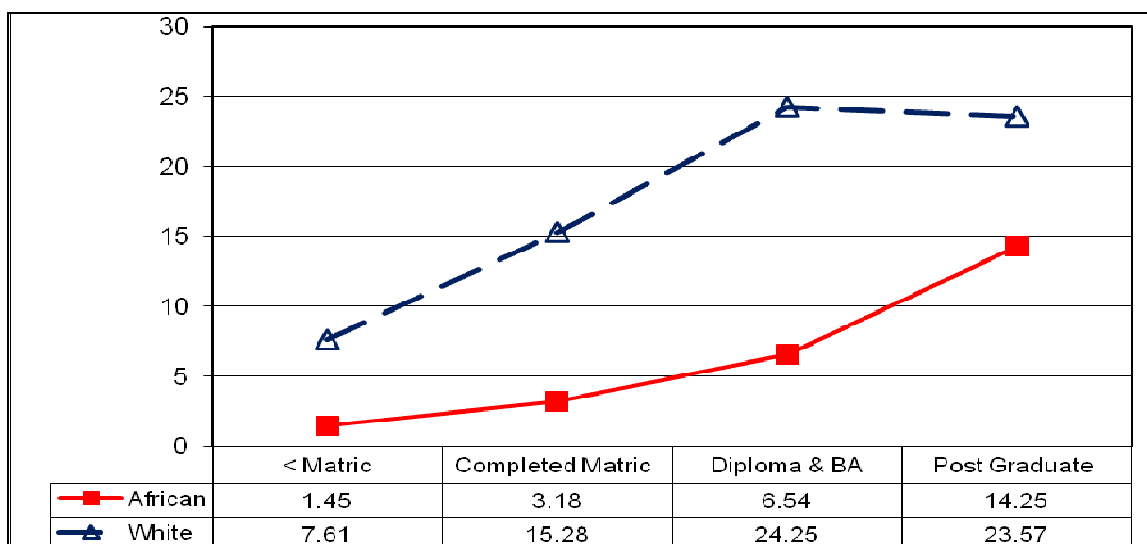


Figure 22. Percent of White and of African young adults in middle class households with managerial jobs by educational attainment (returns to education), 2004-2006

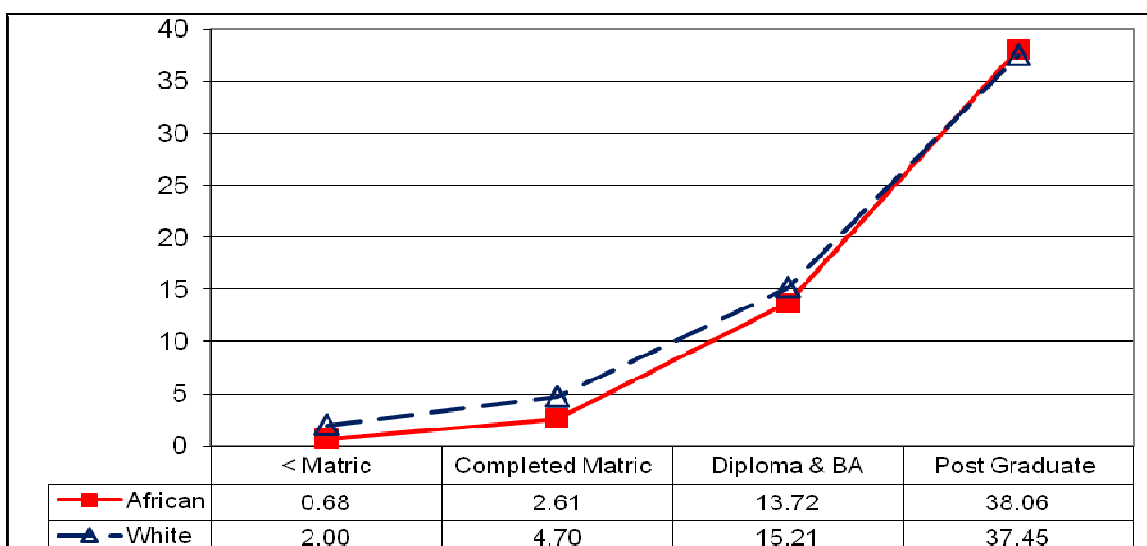


Figure 23. Percent of White and of African young adults in middle class households with professional jobs by educational attainment (returns to education), 2004-2006

Table 3 shows the percent of the difference between African young adults and White young adults in middle class households in holding desirable jobs which is accounted for by differences between the two racial groups in returns to education, that is, the portion of the difference which is *not* due to differences in educational attainment. This is the result of a decomposition that apportions all of the difference between Whites and Africans either to differences in education or to differences in returns to education (Preston et al., 2001: 28-30).

Although there is some fluctuation in the estimates across the three time periods, the stability is quite striking. Differences in returns to education account for almost all of the difference between African and White young adults in middle class households holding managerial jobs, while differences in return to education account for only about ½ of the difference in the percent holding professional jobs. Also, the stability over time indicates that for neither managerial or professional jobs, for young adults from the fairly secure situation of living in a middle class household, was there any substantial change over time. That is, Africans always had a better chance of holding a professional job based on their education than of obtaining a managerial job, but these chances hardly changed from the late 1990s through the mid-2000s.

Table 3. Percent of difference between African and White young adults in occupational category due to differences in returns to education

	1998-2000	2001-2003	2004-2006
Professionals and Managers	72%	77%	77%
Managers	92%	89%	89%
Professionals	30%	54%	38%

Among South African university graduates, Moleke (2005: 10) found that 11% of Africans but 24% of Whites held managerial jobs. Sixty percent of Africans but 57% of Whites held professional or technical jobs.

Moleke (2005: 11) also found that among South African university graduates, the first job of Africans was much more likely to be in the public sector (77%) than for Whites (39%). For current job, 82% of Africans and 29% of Whites were in public sector jobs (Moleke, 2005: 26). Moleke (2005: 13) also found that among South African university graduates employed in the private sector, 10% of Africans but 27% of Whites held managerial jobs. In the public sector, 10% of both Africans and Whites held managerial jobs.

It is likely that the differences in returns to education by race are greater for jobs in the private sector than in the public sector, especially for managerial jobs. We plan to investigate this in the near future.

Between 1995 and 1999 the employment of Africans in professional jobs declined. Poswell (2002) explains this as the result of an overall decline in public sector jobs in that period. In further work we plan to look at public sector and private sector employment of African and White managers and professionals.

This difference in quality of schooling is likely less for those who live in households with a middle class standard of living than for all Whites and all Africans. It is difficult to imagine what differences in quality of schooling could account for the result in Figure 21 in which Whites with less than a matric have a greater chance of holding a managerial job than do Africans with a college degree.

Sometimes people have long worked for an organisation and end up in a managerial position even though they have lower educational attainment than younger employees. In South Africa, this especially could be true for Whites who obtained managerial positions during the apartheid period. However, we have restricted our analysis to adults age 25-39. The oldest persons included in our analyses would have been age 35 in 1994. Thus, although the phenomenon of retention in a managerial position from earlier could have some influence, its influence is less than if we had included adults through age 59.

Some have suggested that for there to be more African managers in South Africa, that there need to be personnel practices that better reflect African values (McFarlin, Coster and Mogale-Pretorius, 1999). However, it is unclear how much of the problem stems from an organizational culture which is not Africanised enough and how much might stem from an

unwillingness to recognise the managerial capability and potential of African applicants and employees.

Human (1996) reviewed studies from the late apartheid period of perceptions about Blacks on the part of Whites in South Africa and found many things that would suggest that White decision-makers would have been reluctant to put Blacks in managerial positions. Blacks were seen as inferior and as less intelligent than Whites (Adam and Moodley, 1993: 105), a study of mainly White business people found that Blacks were seen as not objective enough to evaluate business situations (Human and Hofmeyr, 1987). One would hope that these perceptions had changed, but further research would be necessary to determine whether such views still affect whether Africans get managerial positions in South Africa.

For the United States, Beatty (1973) and Cox and Nkomo (1986) found that social behaviour factors, such as friendliness, were more important in performance evaluations of Black managers than of White managers. Almost all of those doing the evaluations were White. Use such subjective criteria can increase the role of racial stereotypes to the disadvantage of African-American employees.

Concluding Remarks

The proportion of South African households with a middle class material standard of living has increased since 1998. This increase has been striking for urban Africans. Over time Africans are likely to comprise an ever-increasing proportion of all middle class households. However, African middle class households have lower expenditures than other middle class households, and young adults from middle class African households have a lower chance than young adults from White middle class households to obtain desirable professional or managerial jobs. This situation would improve only slightly if African young adults in middle class households had the same educational distribution as White young adults from middle class households. Although South Africa has made great progress, much remains to be done.

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Appendix 1. Decision not to use the data from the 1995-1997 October Household Surveys for most purposes

The 1995-1997 October Household Surveys had some deficiencies, compared with the surveys conducted in 1998 and later. The African sample for the 1995 survey seems to have been drawn from disproportionately economically well-off areas, leading to an estimated decline in the welfare of Africans between 1995 and 1996, even when this is not plausible. For example, for 1995 it was reported that 32% of all African households had a water tap in the dwelling – for each year 1996-2005, the reported percent of African households with a tap in the dwelling never exceeded 26%. Although we used recalculated weights based on the 1996 South African Census for the 1995 data, this does not take care of the problem in the 1995 sample for Africans.

The 1996 October Household Survey was conducted in the same year as the South African Census, putting a strain on Statistics South Africa resources, with some effects on the quality of that survey (c.f. Anderson and Phillips, 2006: 3).

In the 1997 October Household Survey, for Africans the sanitation situation reported for Africans is inexplicably good, being substantially better than that reported for either 1996 or 1998. For example, it was reported that in 1997, 19% of rural African households had a flush toilet in the dwelling, while this was reported for 3% of rural African households for both 1996 and 1998. The implausibly better sanitation situation in 1997 compared to 1996 and 1998 also is clear in Romani and Anderson (2002).

Appendix 2. Projection of the number of all households and of the number of households with a middle class standard of living

The total number of households and the number of households with a middle class standard of living for each year 1996-2006 were estimated from the 1996-1998 October Household Surveys, the 2000 and 2001 Labour Force Surveys and the 2002-2006 General Household Surveys. The household weights for each survey were used to obtain the estimates. The year 1996 began the series due to the 1996 South African Census, which was thought to have a firmer estimate of the South African population by population group than did population surveys.

The estimates were done separately for each population group. Considering the small number of households for some groups, such as Asian households, there was a fair amount of year to year variability. In order to minimize this variability, the estimated values for 1996 and for 2006 were accepted, but for every year 1997-2005, the estimated value for the given year was replaced by the three year moving average. Thus the value for 1998 was the average of the directly estimated values for 1997, 1998 and 1999. This moving average minimized the influence of the problem with reporting of flush toilets discussed in Appendix 1.

Then a curve was fitted for each group to the three-year averaged number of households and the three-year averaged number of middle class households. These projections are based on the assumption that populations grow exponentially. Thus, an exponential equation of the form $Y=B_0 * e^{B1*Year1}$ was fitted for each population group. Year1 was the actual year of the observation minus 1900. This was done to make the coefficients more manageable, but it had no effect on the fitted values.

The fitted values for the number of households and for the number of middle class households for each population group were estimated for every year 2007-2026. The estimated values of the number of households and of the number of middle class households for all of South Africa were calculated by summing the number of households and the number of middle class households for the four population groups. The percent of households that had a middle class standard of living for each population group and for all South African households was calculated by dividing the fitted number of middle class households by the fitted total number of households.

Table A1 shows the value of the percent of households by population group with a middle class standard of living, and Table A2 shows the percent distribution of middle class households across population groups at five year intervals.

Table A1. Percent of households by population group with a middle class standard of living

	1996	2001	2006	2011	2016	2021	2026
African	6.40	9.42	13.87	20.42	30.05	44.23	65.10
Coloured	37.82	43.42	49.85	57.24	65.72	75.46	86.64
Asian	72.38	74.54	76.76	79.05	81.41	83.84	86.34
White	81.77	83.54	85.35	87.20	89.09	91.02	92.99
All South Africans	23.80	24.35	26.40	30.60	37.88	49.66	67.98

Table A2. Percent distribution of all households with a middle class standard of living by population group

	1996	2001	2006	2011	2016	2021	2026
African	19.21	29.08	41.23	54.33	66.64	76.85	84.51
Coloured	13.81	14.48	14.22	12.98	11.03	8.81	6.71
Asian	9.86	8.35	6.62	4.88	3.34	2.16	1.33
White	57.11	48.09	37.94	27.81	18.98	12.18	7.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Appendix 3. Coding of education categories

Coded as Matric

Grade12/Standard 10/Form 5/Matric

NTC III

Diploma/Certificate with less than Grade 12/STD 10

Coded as BA/Diploma

Diploma/Certificate with Grade 12/STD 10

Degree/Bachelors Degree

Coded as Post Graduate

Postgraduate Degree or Diploma

Bachelors Degree and Diploma

Honours Degree

Higher Degree (Masters, Doctorate)