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Chapter 10
SOUTH AFRICA:
The Legacy of *Apartheid*: Racial Inequalities in the New South Africa

Donald J. Treiman

CHAPTER SUMMARY

The legacy of 350 years of apartheid *practice and 50 years of concerted* apartheid *policy has been to create racial differences in socioeconomic position larger than in any other nation in the world. Whites, who constitute 11 percent of the population, enjoy levels of education, occupational status, and income similar to and in many respects superior to those of the industrially-developed nations of Europe and the British diaspora. Within the White population, however, there is a sharp distinction between the one-third of English origin and the two-thirds of Afrikaner origin. Despite* apartheid *policies explicitly designed to improve the lot of Afrikaners at the expense of non-Whites, the historical difference between the two groups continues to be seen in socioeconomic differences at the end of the 20th century. Still, the disadvantages of Afrikaners are modest compared to those of non-Whites, particularly Coloureds and Blacks, who bear the brunt of* apartheid *policies. Ethnic penalties are especially large for people with lower levels of education. For those with less than a tertiary education, there appears to be an occupational floor under Whites and an occupational ceiling over non-Whites. For the small minority of Blacks and Coloureds with tertiary education, the likelihood of being employed and the kinds of jobs available differ relatively little from the opportunities of Asians and White; but for the vast majority lacking tertiary education the ethnic penalty is very large, particularly for Blacks. Most are unable even to find work, with about 40 percent of Black men and more than half of Black women unemployed; and those who are employed are relegated largely to semi- and unskilled jobs. Although tertiary education minimizes racial differences in occupational opportunities, it has little effect on racial differences in income, which are large even among the well educated and even among those working in similar occupations.*

INTRODUCTION

South Africa, with a current population of about 45 million, is a country of unusual sociological interest, in large part because until 1994 it was the only remaining national society whose political system and state institutions were explicitly designed to secure the advantage of one ethnic group at the expense of the remainder of the population. In South Africa, a small minority, comprised of immigrants from Europe, dominated the majority from the 17th century until the 1994 transformation to a non-racial democracy. It is thus of great interest, on both theoretical and policy grounds, to understand how the system of racial domination was organized and what its consequences have been for the socioeconomic opportunities and achievements of South Africa's component racial groups. This paper addresses the consequences—the racial

inequalities left as a legacy of the *apartheid* system of racial domination in place from 1948 through 1994.

South Africa's four official racial groups ('Whites', 11 percent of the population in 1996; 'Asians', 3 percent; 'Coloureds', 9 percent; and 'Blacks', 77 percent)[1] differ substantially in their income and other socioeconomic attributes. In 1996, non-White men, who together constituted 81 percent of the male labour force, on average earned 23 percent of what White men earned, up from 19 percent in 1991 and 15 percent in 1980 (Treiman, McKeever, and Fodor 1996:112).[2] Thus, at the dawn of the new South African dispensation, racial differences in South Africa were far larger than in other multi-ethnic countries. For example, in the U.S., Black males in 2000 earned, on average, about 67 percent of what non-Hispanic White males earned (U.S. Bureau of the Census 2001). In Israel, Arabs in 1983 earned 63 percent of what Jews earned (Semyonov 1988). This paper extends previous work analyzing racial differences in occupational status and income in South Africa in 1980 and 1991 (Treiman *et al.* 1996), using data from the most recent South African census available for scholarly use—that conducted in 1996.[3] Before describing these data, I briefly review the history and social structure of South Africa.

A (VERY BRIEF) INTRODUCTION TO THE SOCIAL DEMOGRAPHY OF SOUTH AFRICA[4]

The earliest known residents of what is now South Africa were hunters and herders known as the Khoi, who are genetically related to the present day San people ('Bushmen') of the Kalihari desert of Botswana. The influx of Bantu-speaking herders from Central Africa, starting in the 4th Century A.D., had driven the Khoi into a relatively small area near present-day Capetown, which is where employees of the Dutch East India Company found them when they established a refuelling station in 1652. Unions between Dutch men and Khoi women resulted in what is now known as the 'Coloured' population, genetically enriched by later unions with slaves imported from elsewhere in Africa and from the Dutch East Indies, particularly Malaysia and Indonesia, and with people from the Indian subcontinent who arrived in the late 19th Century.

Over the 200 years subsequent to first contact, the Dutch settlers, supplemented by French Huguenots and Germans, gradually spread East and then North, subsisting as semi- migratory cattle herders (*trekboers* in Afrikaans, literally 'wandering farmers') in much the same manner as the Bantu-speaking people who already occupied the areas into which the Afrikaners, as the

[1] Computations from the 1996 census. Although there are many ethnic distinctions within racial categories, almost all statistical tables published by the South African Central Statistical Service (now known as Statistics South Africa) are divided on the basis of race, using these four categories, a usage that has held from at least the 1904 census continuously through the 2001 census. For convenience, I refer to these groups without quotation marks.

[2] The increase in the non-White/White ratio is surely an under-estimate since the 1980 and 1991 ratios exclude the TVBC States, *bantustans* hived off from South Africa from the early 1970s until 1994 in an effort to increase the White fraction of the population and reduce the cost of providing for poor rural Blacks (Thomson 1990). About a quarter of the Black population of South Africa lived in the TVBC States, and they were disproportionately impoverished even relative to the Black population as a whole.

[3] A similar micro-data public use sample from the 2001 census is scheduled for imminent release but as of this writing is not yet available.

[4] This account draws heavily on Houghton (1976), McLaughlin (1981), Davenport (1987), and Thompson (1990).

European settlers came to be known, were moving. A series of clashes ensued, almost always won by the Afrikaners due to their superiority in fire arms. The Afrikaners remained a largely rural, ill-educated, and poor population until well into the 20th Century.

In 1820, after the acquisition of South Africa by Britain following the Napoleonic Wars, English settlers began to arrive. The English from the outset established themselves as an urban commercial class, and also as the governing class of South African society.

In 1867 diamonds were discovered, and 17 years later gold, both discoveries fuelling a large influx of skilled miners and those seeking commercial opportunities from England and other parts of Europe, and creating the foundation for South Africa's industrial development. The technology required to exploit the gold reserves also had profound implications. Since the gold-bearing ore was of low grade, its profitable extraction required large capital outlays and low labour costs. The solution of the mining companies was to pay a small number of White miners high wages and a large army of Black labourers very low wages, but to force Blacks to take work in the mines (and on White farms) by instituting a hut tax, payable in money. Even the hut tax was not sufficient to induce Blacks to work on sugar cane plantations established by English commercial farmers in Natal, so indentured agricultural labourers were imported from the Indian subcontinent, starting in 1860 and continuing until 1911 (Thompson 1990:100).

An attempt in 1921 to substitute Black for White labour in the mines, and thereby further reduce the wage bill, led to a major strike on the part of the White workers—ironically, led by the communists—which ended in suppression by the army but achieved its intended effect in 1924 with the election of a Nationalist-Labour coalition government and enactment of the 'Civilized Labour Policy' establishing wage differentials based on race and the restriction of certain categories of employment to Whites. The following 70 years were marked by a variety of policies designed to ensure the continuing advantage of the White population, and particularly the upward mobility of the Afrikaner population. These policies cannot be detailed here, but their result has been to sharply reduce the difference in socioeconomic status between the Afrikaners and English-speaking Whites. In 1948 the National Party gained a majority (only Whites and, in Cape Province, Coloured men with substantial property, could vote), and immediately began formalizing customary racial distinctions and creating new ones. Every individual was officially classified by race; interracial marriage was made illegal; residential segregation was instituted, together with racial restrictions on where commercial property could be owned; jobs were reserved for people of specified race, and unemployment compensation for Blacks was abolished; a separate educational authority for Blacks was established; and, to consolidate White power, Coloureds were dropped from the electoral rolls and, under the pretext of the suppression of communism, the government was empowered to declare unlawful any organization or publication it considered 'subversive'.

Two other policies were instituted to bolster the relative size of the White population. Early in the century, some 13 percent of the land area of South Africa—mainly the least productive land in the country—had been designated as Black 'homelands'. During the 1960s and 1970s, 3.5 million Blacks were 'removed' from the cities to their nominal 'homelands', often places where neither they nor their ancestors had lived (Platzky and Walker 1985; Davenport 1987). Then, in the 1970s, four of the 10 homelands (the 'TVBC' States: Transkei, Venda, Bophutatswana, and Ceskei) were set up as puppet states, nominally independent from South Africa. As of 1991, the

last date for which there are adequate data, some 38 percent of the Black population of (internationally recognized) South Africa lived in the six homelands still included within the 'South African' polity and 24 percent lived in the TVBC States. The rural areas of the homelands and TVBC States were—and no doubt still are—extremely economically marginal. The land was not productive and there were no non-agricultural jobs to speak of, which meant that residents either commuted extremely long distances to work in 'White' South Africa or became migrant labourers, leaving behind a population disproportionately comprised of women, children, and the elderly.

Second, selective immigration of Whites to South Africa was encouraged. Although White immigration (there was virtually no non-White immigration) was sharply curtailed in 1948 for fear that immigrants would dilute the Afrikaner majority, the situation soon changed: as neighbouring Southern African states acquired independence their White populations were welcomed to South Africa. This, of course, produced a selective migration of people uncomfortable with Black rule. In addition, immigration from Europe gradually began to be encouraged. This is not the place to recount the collapse of *apartheid*. Suffice it to say that a combination of the resources and energy necessary to sustain the domination by force of a huge majority by a small minority; increasing pressure from the business elite for more efficient use of labour, which required improving Black education; the increasing toll of the international boycott, which created both economic hardship and a strong sense of isolation; and an increasingly successful campaign of non-White resistance, led first to the gradual relaxation of racial restrictions, starting in the 1980s, and ultimately to a negotiated transition to a non-racial government in 1994.[5]

The analysis reported here, which is based on data from the 1996 census, conducted two and a half years after the April 1994 election, can thus be seen as a description of the extent and pattern of racial inequality at the point of transition, establishing a baseline against which attempts by the new government to reduce racial inequalities can be measured.

DATA AND RACIAL/ETHNIC CLASSIFICATION

This analysis is based on data from a 10 percent public use micro-data sample from the 1996 Census of South Africa (Statistics South Africa 1996). In keeping with the specifications for the comparative project of which this paper is a part, the analysis is restricted to people aged 18-59. Since there was some undercount of the population, all the analysis utilizes 'person weights' designed to correct for differential undercount.[6]

[5] For a fascinating account of the dynamics involved in the decision by the Nationalist Party leadership to voluntarily relinquish power, see Emery (2001).

[6] The undercount was quite substantial—10.7 percent of the population, as estimated from a post-enumeration survey—and was most substantial among young adult males, as it is in virtually all societies. Also, the undercount was greater for Blacks and Coloureds than for Whites, and greater for Whites than for Asians. See Statistics South Africa (1998: Ch. 4) for details.

Racial/ethnic classification

As noted above, South African statistics always distinguish four racial groups: Whites, Asians, Coloureds, and Blacks. Each of these groups can be further subdivided on the basis of the language spoken at home, religion, and national origin. It is already known that socioeconomic differentiation within races is small relative to between-race differences (Treiman *et al.* 1996). However, to permit detailed cross-national comparisons, the authors of each chapter have been charged to present descriptive statistics for all of the major ethnic groups within each nation. Here I start by presenting basic statistics for a 28-category classification, designed to ensure at least 1,000 people in each category in the sample, or 10,000 in the population. The subsequent analysis is based on a reduced set of categories.

The 28 category classification, shown in Table 10.1, was created on the basis of information from four variables—race[7], home language[8], religion[9], and place of birth[10]—which I combined using my best judgement as to what constitute meaningful ethnic groups in the South African context. Here are the details.

Whites. The primary division of Whites in South Africa, which has persisted for nearly two centuries and is still important today, is between Afrikaners and English-speaking Whites (Thompson 1990). As noted above, the Afrikaner population began as *trekboers* and then, as the mines developed and the cities grew, began to fill skilled manual jobs. As we will see, their lower socioeconomic status, relative to English-speaking Whites, persists today, although in muted form. The English-speaking White population consists mainly of the descendants of those who came to South Africa in the 19th century, as an economic and political elite. However, there are important subgroups within the English-speaking population[11]: Jews, who began to arrive in the late 19th century and played an important role in the development of mining and other industries, and who remain a distinctive community[12] (Lever 1978, 1979); immigrants from

[7] The census question was "How would (the person) describe him-/herself?" The listed response categories were "African/Black," "Coloured," "Indian/Asian," and "White."

[8] The census question was "Which language does (the person) speak MOST OFTEN AT HOME? Write the language in the space provided."

[9] The census question was "What is (the person's) religion, denomination or belief? Please state the complete name or official abbreviation e.g. Apostolic Faith Mission; Catholic Church; Dutch Reformed Church; Hindu Faith; Muslim Faith; Zion Christian Church (ZCC). If no religion, write 'none."

[10] The census questions were "Was (the person) born in South Africa? (Include the former Transkei, Bophuthatswana, Venda, Ciskei - TBVC states)." "If 'no', In what country was the person born? Write in the name of the country."

[11] Those whose home language is neither English nor Afrikaans generally prefer to speak English, both because it is the elite language and because Afrikaans was regarded as the language of the oppressor. Many—including European immigrants, Asians, and upwardly mobile Coloureds and Blacks—adopt English as a new home language. Only among those whose home language is similar to Afrikaans (German and Dutch speakers) does any sizable fraction become Afrikaans speakers.

[12] The Jewish category includes all Whites who identified as Jews on the religion question.

Great Britain; and immigrants from other African nations, who fled Black rule after independence. In addition, I have formed a residual category of English-speaking Whites from other nations. Four other groups complete the White population: a visible Portuguese[13] community, consisting mainly of those who left Portuguese Africa after independence, and who tended to become small shopkeepers in South Africa; Germans[14], the largest among several European immigrant groups; and two residual categories of Whites speaking languages other than English or Afrikaans: those born in South Africa and those born abroad.

Asians. I divided Asians into three groups on the basis of religion: Moslems, Hindus, and those who practice other religions (mostly Christians). Historically, Moslems and Hindus have differed in socioeconomic status because they differed at the outset—during the great immigration at the end of the 19th century, Moslems were much more likely than Hindus to have paid their own passage and to have arrived in South Africa with some capital (Pachai 1971:7). The third group, those of other religion, are mainly converts from Hinduism (Oosthuizen 1979:545), although this category also includes the descendants of the 60,000 Chinese imported during the first few years of the 20th century to work in the mines (Richardson 1982), as well as a few foreign-born East Asians, mainly from Taiwan, living in South Africa for commercial reasons. Even combining all people of Chinese descent, the group is too small to treat separately.

Coloureds. The Coloured population, formed from unions between Afrikaners and various Black and Asian populations (see above), is culturally similar to the White Afrikaner population— they mainly are Afrikaans-speaking and members of the same Christian denominations. However, there are two distinctive small subgroups of Coloureds—Moslems (7 percent of Coloureds) and English-speakers (14 percent of Coloureds), although the latter group may reflect the consequences of upward mobility more than anything else (Patterson 1953:167; Thomas 1982).

Blacks are subdivided on the basis of home language, except that a separate category, foreign-born Blacks, is added (these are mostly migrant workers from neighbouring Southern African states), as is a residual category, 'Other Blacks'. There are two main groups of Blacks, Zulus (30 percent of the Black population) and Xhosas (22 percent of the Black population), but there are nine language groups in all, plus the two additional categories.

Race unspecified/Griqua. Finally, a small group of people who either failed to specify their race or who claimed to be 'Griquas' is treated as a separate category. Griquas are mixed race people who in the 19th century were expelled from the Cape Town to the Northern Cape area and then were expelled again to what is now Transkei. The expectation of Statistics South Africa was that they would be counted as 'Coloured', but after protests they were allocated to the 'Other race' category (Christopher 2002:406).

[13] The Portuguese category includes all Whites who either speak Portuguese at home or were born in Portugal or in former Portuguese territories.

[14] The German category includes all Whites who either speak German at home or were born in Germany.

Socioeconomic differentials by race/ethnicity

Table 10.1 provides a summary of the socioeconomic characteristics of each of these 28 groups, which are arrayed by race and within race by median income. As would be expected from the *apartheid* history of South Africa, even the least advantaged White groups—Afrikaners and Portuguese—have far higher incomes than any non-White group, and on average Whites have about twice the incomes of Asians, nearly four times the incomes of Coloureds, and more than five times the incomes of Blacks. Whites are also far less likely to be unemployed, followed in order by Asians, Coloureds, and Blacks, among whom more than 40 percent are unemployed. Finally, there are substantial differences both between and within racial groups in the likelihood of working at high status occupations—non-manual jobs and also professional and managerial jobs (hereafter referred to as the 'salariat'). Interestingly, within-race differences in occupational distribution are not the simple consequence of within-race differences in educational attainment, which tend to be relatively small, although Whites enjoy a nearly two year advantage over Asians, who in turn have a two year advantage over Coloureds and a three year advantage over Blacks. There are several noteworthy distinctions between ethnic groups within each of the race categories.

Whites. First, Jews continue to be an elite group among South African Whites, enjoying the highest incomes together with immigrants from England and Germany, and also are disproportionately engaged in high status occupations, with nearly 90 percent working in non-manual jobs and nearly two-thirds in the salariat. Second, Afrikaners have not yet achieved equality with English-speaking South-African-born Whites; although nearly equally well-educated, they have lower incomes and are less likely to work at non-manual jobs and, specifically at jobs in the salariat. Third, although—as noted above—the least advantaged Whites have substantially higher incomes than members of any other racial group, they are not much different from Asians and elite Coloureds in their likelihood of obtaining salariat positions. Thus, there is clear evidence (which will be documented below) of a racial penalty with respect to income, net of education and occupational status.

Asians. As expected, Moslems have somewhat higher status occupations than either Hindus or Asians of other religions. However, in these data the three groups are very similar with respect to income, in sharp contrast to the situation in 1980 and 1991 when Moslems had substantially higher incomes (Treiman *et al.* 1996:115).

Coloureds. Note that with the exception of the small Moslem and English-speaking groups, the Coloured population has little more schooling than many of the Black groups, is no more likely to hold non-manual or salariat jobs, and at the median has incomes hardly larger. The higher status of Moslems probably reflects the similarity between their origins and those of Moslem Asians. Although the Coloured population includes some descendants of Malaysian and Indonesian slaves, these were very small populations and it is much more likely that some Moslems got arbitrarily classified as 'Coloured' during the rushed classification process resulting from passage of the Population Registration Act of 1950. The relatively high status of English-speaking Coloureds is perhaps misleading, and an argument could be made that they should not be distinguished from other Coloureds since their choice of language may well be a *consequence* rather than a *determinant* of their socioeconomic status; successful Coloureds may switch from Afrikaans to English in an effort to consolidate their status gains. Unfortunately, I have no data with which to test this conjecture.

Blacks. Although, for reasons that are not at all clear, the Venda, who live in the far north of South Africa, have the highest percentages employed in non-manual jobs and in the salariat, and nearly the highest incomes, the remaining Black groups are, with one exception, relatively similar. The exception is the foreign born, who come mainly from other Southern African nations on short term labour contracts to staff the mines and to do other manual jobs. This recruitment source means that they are a distinctive group—less well-educated than the typical South African Black, much more likely to do manual work, and far less likely to be unemployed. They are mostly men, living apart from their families. They are in South Africa to work, and when there is no work they go, or are sent, home.

IMMIGRATION TO SOUTH AFRICA

In keeping with the thrust of the comparative project, I carry out some analysis of immigration patterns before turning to the main story, which is one of racial distinctions among native South Africans. For this purpose, I distinguish English-speaking Whites, Afrikaans-speaking Whites, and 'other Whites'—those speaking a language other than English or Afrikaans at home.

Table 10.2 shows the distribution of the adult population (aged 18 to 59) by race and gender. In fact, there are no gender distinctions of note. For only a small fraction of the population is race unspecified. These people are dropped from further analysis. Among Whites, 3.3 percent speak a language other than English or Afrikaans at home; these 'other Whites', constituting only 0.4 percent of the population, are retained only for this and the following tables and are then dropped. Note that a majority of Whites (58 percent) are Afrikaans-speaking.

The only groups with substantial immigration from foreign countries are English- speaking Whites and the small fraction of 'other Whites'. Nonetheless, Table 10.3 lists, for all but Coloureds, for whom the percentage foreign-born is extremely small, the nations contributing at least 2 percent of the immigrant pool. From Table 10.3 it is evident that by far the largest group of foreign-born English speakers is from England and the bulk of the remainder are from Anglophone African nations, mainly Zimbabwe, which has always had close ties with South Africa (recall that Zimbabwe was formerly Southern Rhodesia).

The largest group of 'foreign-born' Afrikaans-speaking Whites is not truly foreign, since Namibia, a German colony until World War I, was ruled as a mandate and then annexed by South Africa after the Second World War, gaining its independence only in 1990. About 11 percent of foreign-born Afrikaans speakers were born in the Netherlands, which is not surprising given the predominantly Dutch origins of the Afrikaner population and the Afrikaans language.

The dominant group of Whites speaking other languages is from Portugal/Madeira or Mozambique, a former Portuguese colony sharing a border with South Africa. In addition, Europeans seeking economic opportunities, from Germany and from Southern Europe (Italy and Greece), have contributed to the small 'other White' population. Foreign-born Asians have mainly come from India, presumably regarding life in *apartheid* South Africa as preferable to life at home, and perhaps pulled by family connections. Interestingly, 15 percent of the Asian influx is from Taiwan, a country with which *apartheid* South Africa established economic ties in 1976. The Taiwanese-origin population presumably has diminished since 1997 when the new South African government cut diplomatic ties with Taiwan.

With limited exceptions, Blacks from other African nations have not been permitted to immigrate to South Africa. However, there is a long-standing pattern of temporary labour migration to staff the mines, primarily from Mozambique and from Lesotho, a small (fewer than 2 million population) mountainous nation entirely surrounded by South Africa. There also is a certain amount of illegal migration from other Southern African nations that share borders with South Africa.

DIFFERENTIALS WITHIN THE NATIVE-BORN SOUTH AFRICAN POPULATION

The remainder of the analysis is restricted to native-born South Africans, divided by race and, among Whites, into English-speaking and Afrikaans-speaking subgroups, with the small fraction of Whites speaking other languages (less than 2 percent of all Whites) dropped from further consideration. However, I show results separately for men and women.

Educational attainment

Tables 10.4A (for men) and 10.4B (for women) show the distribution of educational attainment by race/ethnicity. Each category includes those who have at least some education at that level.[15] With respect to education, gender differences are quite small, although among Whites and Asians women are somewhat less likely to have any tertiary education. By contrast, race differences are very large. For Whites the social minimum is at least some secondary schooling. But this is not the case for non-Whites. Blacks, in particular, suffer a severe educational penalty, with nearly 20 percent entirely without schooling and more than half with no more than primary schooling, below the social minimum for Whites. Similarly, whereas about 30 percent of Whites have some tertiary schooling, a fraction comparable to those in the U.S., Israel, Japan and Taiwan (Müller and Shavit 1998:12), and more than 10 percent have a B.A. or better, only about 3 percent of Blacks have any tertiary education and less than 1 percent have a B.A. or better. These huge disparities reflect a concerted policy of minimizing educational opportunities for non-Whites, especially Blacks, and subsidizing White education (Robertson and Robertson 1977; Fedderke, de Kadt, and Luiz 2000). With respect to education, in common with all socioeconomic characteristics, the ordering of the data reflects the racial hierarchy of South Africa: Whites, Asians, Coloureds, and Blacks. Asians and Coloureds do better than Blacks but not as well as Whites, and Asians do better than Coloureds. Finally, the table reveals a lingering disparity in the educational attainment of English-speaking Whites and Afrikaners. English-speaking Whites are somewhat more likely to get at least some tertiary education, and also to get a university degree. But these differences are small relative to those between the different races.

Economic activity

With regard to economic activity (shown in Tables 10.5A and B), also, racial differences are very large and differences between the two White groups are small. The most striking aspect of these tables is the extremely high unemployment rate among Blacks. More than half of the economically active women, and more than a third of the economically active men (defined as the sum of the 'employed' and the 'unemployed'), are unemployed and looking for work, compared to less than 5 percent of Whites, with Asians and Coloureds again in between (see the bottom row of each panel of Tables 10.6A and B). There is a clear racial gradient in the

[15] See note c to Table 10.1 for a discussion of how the education categories were created.

propensity to be economically inactive for reasons other than going to school or keeping house, which probably reflects a combination of a 'discouraged worker' effect—after a while the chronically unemployed give up and withdraw from the active pursuit of employment—and racial differences in physical and mental disabilities that reflect differences in both economic and social status (Statistics South Africa 2004: Ch. 5). Blacks are more likely than members of other groups to still be in school, a reflection of both late school starting ages for Blacks and a relatively high propensity to be required to repeat grades (Anderson, Case, and Lam 2001). Finally, as Table 10.5B shows, South African women tend to be economically active, with the exception of Asian women, nearly 40 percent of whom are homemakers.[16]

One implication of the racial differential in the propensity to be employed, highest among Whites and lowest among Blacks, is that employed Blacks are almost certainly more highly selected on the basis of unmeasured characteristics positively related to socioeconomic outcomes than are employed Whites, with Asians and Coloureds, as always, falling in between. When employment is difficult to obtain, only the 'best and the brightest', those with the personal attributes that make them particularly likely to do well, are likely to be successful in finding jobs. The result of this kind of sample selection bias is to understate the 'ethnic penalty' in occupational status and income—that is, the true race difference that would emerge if we were able to control for the unmeasured characteristics that differentiate employed people in each race group.

Occupational class

Tables 10.6A and B show the distribution of the economically active population across occupational class categories, by race/ethnicity and gender. I have followed the specifications of the comparative project[17], except that I have included the very small fractions of subsistence farmers (less than 13 per 10,000 of any race group) with semi- and unskilled manual workers and have coded all other farmers in the petty bourgeoisie category even though many White-owned farms are quite large and employ many Black or Coloured farm labourers; unfortunately, the

[16] Cheung and Heath, in their paper in this volume, show (Table 12.4B) that a much higher proportion of first-generation Pakistani/Bangladeshi women than women of any other group are homemakers, and that the percentages of homemakers among second-generation Pakistani/Bangladeshi and first-generation Indian women are also high. Among women from 'Asian' (Indian sub-continental) origins, I find a modestly greater propensity for Moslems to be homemakers than is true of Hindus or those who have adopted Western religions (the percentages are, respectively, 44, 37, and 34). Recall that I have restricted this portion of the analysis to the South African born, so that they correspond to Cheung and Heath's second generation.

[17] See the discussion by Heath in Chapter One of this volume. Mapping the categories of the 1996 South African Census occupation classification into EGP categories is relatively unproblematic, since the census classification is based on a 3-digit version of the 1988 International Standard Classification of Occupations (ILO 1990), which means that it was possible to use the ISCO-to-EGP algorithm provided by Ganzeboom and Treiman (1996). The one difficulty was in distinguishing between EGP categories IIIa (Routine non-manual workers, Higher grade) and IIIb (Routine non-manual workers, Lower grade), which were combined by Ganzeboom and Treiman into a single category but which had to be split here because in the specification for this volume, EGP category IIIb is combined with EGP categories VIIa and VIIb, to form a single 'semi- and unskilled manual worker' category. Unfortunately, no detailed coding manual has been published by the authors of the EGP scheme. However, on the basis of the discussion in Erikson and Goldthorpe (1992:44), I treated the following South African census occupation categories as 'Routine non-manual workers, Lower grade', and hence ultimately as 'semi- and unskilled workers': 410, 414-419, 520, 522-530, 910-911.

1996 South African census does not include information on the number of employees, required to distinguish between small holders and large commercial farmers. I have also included a separate category for 'occupation unknown'. Since the census asked one member of each household to report on all persons in the household, there is a substantial amount of missing data—for about 9 percent of men and 5 percent of women. This category also includes a small number of people whose reported occupations were unclassifiable. There was also a substantial fraction of missing data on income, about 8 percent of the population (but less than 4 percent of the employed). There was little missing data for the remaining questions.

Comparing the corresponding rows, it is clear that for both men and women there is a very strong racial gradient. I have already noted the far higher unemployment rates among non-Whites, particularly Blacks, but there are also sharp racial distinctions with respect to the probability of being small employers (petty bourgeoisie). Although we might think of petty bourgeoisie activity as relatively unattractive to Whites, and more attractive to non-Whites, there were strong impediments in *apartheid* South Africa to non-White business ownership, most importantly restrictions on property ownership outside of racially designated areas, but also restrictions on licensing, differential access to bank loans, etc.

The remainder of the tables surely reflect racial differences in educational attainment, although, as we will see shortly, the story actually is somewhat more complicated. Whites, particularly English-speaking Whites, are far more likely than members of other groups to be members of the salariat, and White women are far more likely than others to be higher-grade routine non-manual workers (recall that lower-grade routine non-manual workers are combined with semi- and unskilled workers; see note 16).. Interestingly, there is little racial differentiation in the likelihood of doing skilled manual work, but there is a clear racial differential in the likelihood of doing semi-skilled or unskilled work, with Coloureds and Blacks disproportionately relegated to jobs in this sector.

Despite the limited differentiation between the two White groups with respect to education (Tables 10.4A and B), English-speaking White men are substantially more likely to be in the salariat and substantially less likely to do manual work, especially semi- and unskilled work, than are Afrikaners, which perhaps reflect the rural and working class origins of the Afrikaner population.

Income

Table 10.7A shows the cumulative distribution of monthly income by race, among men who were employed at the time of the census, and Table 10.7B shows the corresponding distributions for women. Although the South African census question refers to income from all sources, in South Africa, as elsewhere, most income is derived from employment. These tables document what we already have seen in Table 10.1—very large differences in income by race. Half of Black men and nearly 40 percent of Coloured men had incomes of less than R1,000 per month (the equivalent of British £140 or U.S. $220), compared to about 7 percent of White men. Similarly, about 30 percent of English-speaking White men, 40 percent of Afrikaner men, 70 percent of Asian men, and 90 percent of Coloured and Black men had incomes of less than R3,500 per month. Interestingly, among employed men the income gap between English-

speaking Whites and Afrikaners is at least as large as that between Coloureds and Blacks.[18] Again, we have evidence that Afrikaners have not quite caught up with English-speaking Whites.

Among women the story is quite similar (Table 10.7B), although in South Africa, as in most other nations (Treiman and Roos 1983; Nelson and Bridges 1999), women's incomes are substantially less than those of men; the median income for women is 59 percent of that of men and the odds that a man will be in a higher income category than a woman is 1.81:1. The gender income gap aside, however, racial differences in income attainment among women are quite similar to those for men. More than two-thirds of Black women have incomes of less than R1,000 per year, compared to only about half of Coloured Women, one-quarter of Asian women, and one-eighth of White women, and similar differences appear at virtually all levels of income. However, among women the Coloured-Black gap is larger than the English-Afrikaans gap. Whereas the odds that English-speaking Whites will be in a higher category than Afrikaners is 1.45:1, the corresponding odds ratio for Coloureds and Blacks is 2.03. It is unclear just why the English-Afrikaner difference is smaller for women than for men while the Coloured-Black difference is larger for women than for men.

Of course, the observed differences in income by race and sex are due, in large part, to race and sex differences in the average level of education, in the kind of jobs held, in the level of work experience, and in the number of hours worked. In a later section, I consider to what extent these differences explain the racial (and gender) penalties with respect to income.

DETERMINANTS OF EMPLOYMENT, OCCUPATIONAL STATUS AND INCOME

Thus far we have seen strong racial/ethnic differences with respect to education, employment, occupational status, and income. But these aspects of socioeconomic status are not independent. It is well known that the driving force in occupational attainment is education and that, as was just noted, both occupational position and education are important determinants of income. Moreover, in most societies the likelihood of being employed, and also occupational standing and income, tend to increase with age, at least through most of the career cycle, although at some point both employment and income begin to decline as people shift to part-time or less demanding work or even become unable to work.[19] Thus, the obvious question is to what extent observed racial/ethnic differences in these outcomes simply reflect racial/ethnic differences in education—which, as I have already noted, are the direct consequence of *apartheid* policies—and also in age, since because of their relatively high fertility and also their poverty, which

[18] The evidence for this claim is that when the income categories are treated as ordinal categories, the odds that English-speaking Whites will be in a higher category than Afrikaners is 1.67:1, while the corresponding odds ratio for Coloureds and Blacks is 1.63.

[19] In what follows, I interpret age differences as 'life cycle' effects. The alternative, of course, is that age differences reflect the experiences of different birth cohorts. Unfortunately, given that the data used here are cross-sectional and contain no information about past experience, it is impossible to distinguish between the two sorts of effects. However, some indication that life cycle effects dominate cohort effects can be found in the patterns of increasing socioeconomic status with age, particularly for non-Whites, which is contrary to what we would expect if all change were due to improvement in the socioeconomic circumstances of non-Whites as *apartheid* came to an end; in such a case the youngest cohorts would be most advantaged.

reduces longevity, non-Whites, and particularly Blacks, tend to be younger on average than Whites.[20]

Employment

We start by considering racial differences in unemployment. Table 10.8 shows coefficients for a simple binary logit model of whether economically active people are employed—that is, have avoided unemployment—estimated separately for men and women. The coefficients are 'logits'. For continuous predictor variables they indicate the expected difference in the log odds of employment among those who differ by one unit with respect to the specified variable, holding constant all other predictors; for categorical predictor variables they indicate the expected difference in the log odds of employment between individuals in the specified category and individuals in the omitted or reference category, holding constant all other predictors. The variables included in the model are those agreed upon for the comparative project: race, educational attainment and their interaction; and also, as controls, age (divided by 10 to ease interpretation) and its square, and marital status. As expected, the likelihood of employment increases with age for both men and women, but peaks at age 41 for men and at age 50 for women.[21] It is unclear why the two curves differ, but one possibility is that women tend to do less physically demanding work and hence their capabilities are less likely to depreciate with age. Net of all other factors, the odds of men age 41 being employed are more than twice as large as the corresponding odds for men age 18 (precisely 2.3) and even at age 59, the odds of men being employed are about 40 percent larger than at age 18. For women the age-employment curve is much steeper: the odds of being employed at age 50 are more than eight times the odds of being employed at age 18 and the odds of being employed at age 59 are nearly seven times as large as the odds of being employed at age 18. It may be that this is the result of unemployed older women dropping out of the labour force, an option not as readily available to men.

Not surprisingly, the effect of marital status differs by gender. Net of all other factors, the odds that currently married men are employed are more than three times the odds for never married men ($3.4=e^{1.23}$) and the odds for formerly married men are about half again as large as the odds for never married men ($1.49=e^{0.40}$).[22] However, currently married women are slightly less likely than never married women to be employed. Recall again that the analysis is restricted to economically active women and thus does not reflect the propensity for currently married women to be housewives. Perhaps currently married women are more restricted in their occupational opportunities because of their greater need to balance work and family responsibilities. Formerly married women are most likely to be employed, possibly because their circumstances force them to be less choosy about the kind of work they do.

[20] Even within the restricted age range employed in this analysis, 18 through 59, the racial gradient in average age holds: the median ages for Whites, Asians, Coloureds, and Blacks are, respectively, 36, 34, 32, and 31.

[21] For a concave curve, the maximum value can be calculated as $-b_1/2b_2$ where b_1 is the coefficient associated with age and b_2 is the coefficient associated with age-squared.

[22] In this analysis, the "currently married" include all cohabiting couples: those married in a civil or religious ceremony, those married in a traditional ceremony, and those who say they are "living together;" the formerly married include both those who are separated or divorced and those who are widowed.

The central feature of Table 10.8 is, however, the combined effects of race and educational attainment. Because the model is constructed in such a way as to allow the effects of education to vary by race (or, what is the same thing, the effect of race to vary by education), direct interpretation of the coefficients is difficult; these effects are much more readily grasped in graphical form. Figures 10.1A (for men) and 10.1B (for women) show the expected percentage employed by race/ethnicity and education among married people of average age.[23]

The results are similar for men and women but are more dramatic for women. Among those lacking tertiary schooling there are very large racial differences in the probability of being employed. The model predicts that more than a quarter of married, mature, economically active Black men and nearly half of comparable Black women fail to secure employment, and the percentages unemployed are also very high for Coloureds—above 10 percent for men and close to 20 percent for women—and are non-trivial for Asians. Tertiary education substantially reduces, but does not eliminate, the racial gap in unemployment, and completed university education reduces it still further. Recall the large racial differences in educational attainment shown in Tables 10.4. What Figures 10.1A and 10.1B reveal is that tertiary education offers some protection against unemployment for the very small fractions of Coloureds and Blacks who are able to advance that far, while for Whites education is of little importance—virtually no Whites are unemployed regardless of how poorly educated they are. As is typical, Asians fall somewhere in between the other groups.

Occupational position

Tables 10.9A and 10.9B show coefficients for a simple multinomial logit model of the determinants of occupational attainment, for employed men and women, using the 7-category classification shown in Tables 10.6 (except, of course, that the unemployed are excluded). For ease of interpretation, semi-and unskilled work serves as the reference category of the dependent variable. As in Table 10.8, the coefficients shown in the tables are logits, contributions to the log odds of an individual being in the category shown as opposed to working at a semi-skilled or unskilled job, net of other factors included in the model. As before, age (divided by 10), and its square and marital status are included as controls, since occupational status tends to improve with age and among the currently married, at least for men, and, as noted, there are racial differences in average age. Marital status is a somewhat problematic control, since it could be argued that marriage is endogenous to occupational attainment—people marry when they secure good positions in life. But, in keeping with the specifications of the comparative project, I include it here.

Consider first the results for men, shown in Table 10.9A. The effects of age are as we would expect. The odds of employment in the salariat or in petty bourgeoisie positions vs. employment in semi- or unskilled occupations increase sharply with age, and the odds of skilled employment also increase substantially, albeit not quite as rapidly. The coefficients for the squared term are negative for all three outcomes, suggesting that the odds of entering these types of occupations vs. semi- and unskilled positions increase sharply early in men's careers and then level off and reverse. In fact, they peak at age 49, 52, and 41, respectively, for salariat, petty bourgeois, and

[23] Logits are converted to percentages by the formula $p = e^x/(1+e^x)$ where x is the expected log odds evaluated for specified values of the independent variables, here specific combinations of education and race/ethnicity with currently married = 1 and age and age-squared set at their sex-specific means.

skilled positions. Routine non-manual work requires no particular comment since only very small fractions of men of any age or race are employed in such positions. For women—see Table 10.9B—a generally similar pattern holds, except that for both routine non-manual work and petty bourgeois positions, the odds of employment peak much earlier, at age 34 and 31 respectively. Marital status has relatively little impact on occupational attainment, especially for men. But currently married women are somewhat more likely to work at salariat or routine non-manual jobs, and formerly married women to work at routine non-manual jobs than are never-married women. However, the reasons for this are unclear.

To see the combined effect of education and race/ethnicity, we turn to graphs of the expected percentages in each occupational category for married employed persons of average age.[24] Figures 10.2A and 10.2B show the expected percentages in salariat occupations, separately for men and women. Consider men first. These results are striking in a number of ways. First, there is a pronounced racial and ethnic gradient among those with no more than secondary education. The racial difference is dramatic, with a large fraction of Whites, and a smaller but non- trivial fraction of Asians, able to secure salariat jobs even when they lack tertiary education. However, among Whites the English-speaking population is sharply advantaged relative to Afrikaners. Interestingly, there is no difference at all between Coloureds and Blacks. By 1996 the *apartheid*-era advantage of Coloureds over Blacks (Treiman *et al.* 1996) apparently had completely eroded. Second, the racial penalty narrows very substantially among those with some tertiary schooling and reverses among those with university degrees or more. That is, among those with university degrees, Black and Coloured men are somewhat more likely than Asians and English-speaking Whites and still more likely than Afrikaans-speaking Whites of the same age and marital status to attain salariat positions. Recall from Table 10.4A, however, that less than 1 percent of Blacks and only 1.4 percent of Coloureds managed to achieve this level of education, compared to 15 percent of English-speaking Whites, 12 percent of Afrikaans-speaking Whites, and 5 percent of Asians. Thus, university-educated Black and Coloured men are much more highly selected than men of other racial groups.

For women the story is essentially the same and even more orderly, with racial and ethnic differences somewhat smaller at lower levels of schooling than for men, but reversing among those with at least some tertiary schooling. A similar status reversal by race among well educated women was observed 30 years ago in the U.S. (Treiman and Terrell 1975). It is likely that tertiary-educated Black and Coloured women work as professionals and managers in segregated establishments, e.g., schools and hospitals, but my data do not permit me to investigate this. The same caveat as for men applies here as well—Black and Coloured women who achieve a university education are extremely highly selected, as we saw in Table 10.4B—much more highly selected than Asian and especially than White women.

Figure 10.3 shows the expected percentages in routine non-manual occupations for women. There is little point in showing the corresponding figure for men since when the coefficients in

[24] Logits are converted to percentages by the formulas $p=1/(1+\Sigma_{j=1\text{-}4,6}e^{x})$ for the omitted category, 5, of the dependent variable and $p= e^{x}/(1+\Sigma_{j=1\text{-}4,6}e^{x})$ for the remaining categories, where x is the expected log odds evaluated for specified values of the independent variables, here specific combinations of education and race/ethnicity with currently married = 1 and age and age-squared set at their sex-specific means, and a specific category, j, of the dependent variable.

Table 10.9A are evaluated at the mean age for men, virtually no men would be predicted to work at routine non-manual occupations. For women the racial gap is unsurprising—among those lacking tertiary education White women are more likely than Asian women and Asian women are more likely than Coloured or Black women to work at routine non-manual occupations; but here Afrikaner women are a bit more likely than English-speaking White women to occupy such positions. The racial gap narrows substantially among those with at least some tertiary schooling, with English-speaking White women, Asian women, and Coloured women all about equally likely to do routine non-manual work, Afrikaner women the most likely, and Black women the least likely.

Since very few people of any race or either gender occupy petty bourgeoisie positions, graphing race and sex differences is uninformative. Figure 10.4 shows the expected percentages in skilled manual occupations for men; the corresponding graph is not shown for women since very few women do skilled manual work. What is most striking about the graph is that among Afrikaner and Coloured men, the likelihood of doing skilled manual work increases with education up to some tertiary schooling. Only among those with a B.A. or more does the percentage sharply decline. This may reflect the historical working class tradition of both groups, which continues to be reflected in their current role as a labour aristocracy, filling skilled manual and supervisory jobs that today require technical tertiary education. By contrast, for Asians and Blacks the percentage doing skilled manual work declines with education, and English-speaking Whites are unlikely to do such work regardless of their level of education. All in all, however, racial differences are quite modest.

The contrast with semi- and unskilled work, shown in Figures 10.5A and 10.5B, is dramatic. Here racial differences are very large, for both men and women. More than 60 percent of Black and Coloured men and about 80 percent of Black and Coloured women who lack secondary schooling are relegated to semi- and unskilled jobs, compared to much smaller fractions of Asians and even smaller fractions of Whites. The racial gradient narrows somewhat among those with secondary schooling, and more or less disappears among those with at least some tertiary education, mainly because few men and almost no women with tertiary education do such work.

In sum, for a non-White person in South Africa the only way to achieve equality with Whites, at least with respect to occupational attainment, is to obtain at least some tertiary education—something that very few are able to do. Among those with tertiary schooling, racial differences in occupational outcomes are quite small. However, for those lacking tertiary education, they are very large, with Whites frequently able to achieve salariat positions and to avoid semi- and unskilled work but with non-Whites, and particularly Coloureds and Blacks, excluded from the salariat and relegated to semi- and unskilled jobs. That is, for those with less than a tertiary education, there appears to be an occupational floor under Whites and an occupational ceiling over non-Whites. Whether this pattern extends to income is the concern of the next section.

Income

Recall from the note to Table 10.7A that the 1996 South African census solicited and reported income in intervals, with a bottom code of zero and a top code of Rand 360,000 per year. Given this specification of the income variable, I utilize interval regression (StataCorp 2003:Vol. 4,

255-260) to model the determinants of annual income. Since the census question refers to income from all sources, I first model the determinants of income for the entire population, excluding only those missing data on the income question, and utilizing the same predictor variables as in the previous analyses of employment and occupational outcomes. These results are shown in Table 10.10 as Model 1, separately for men and women. Model 2 is restricted to the employed (about half of all men and about one-third of all women) and includes an indicator of full-time vs. part-time employment and also indicators of employment status (self-employed without employees, employers, employees, and family workers). Tables 10.11A and 10.11B replicate Model 2 for each occupation category, separately for men and women.

In both Models 1 and 2 the effects of age and marital status are similar to those we observed for employment and occupational outcomes: income increases with age and then declines. Currently married men have the highest incomes, followed by formerly married men, but formerly married women have the highest incomes, net of all other factors. The additional variables included in Model 2 also behave as expected: those who work full-time earn substantially more than those who work part time[25]; employers earn substantially more than those who are self-employed without employees; and family workers earn substantially less. Interestingly, among men employees do not do quite as well as the self-employed without employees while female employees earn more than women who are self-employed without employees. It may be that in South Africa women who are self-employed without employees are disproportionately small-scale vendors of foods or other self-made goods, but I have no data with which to check this conjecture.

As before, the best way to assess the joint effects of education and race is to graph them. Figure 10.6A shows incomes predicted from Models 1 (top panel) and Model 2 (bottom panel) for men and Figure 10.6B shows the corresponding predicted incomes for women. Inspecting Figure 10.6A first, the contrast with the employment and occupational outcome graphs is striking. With respect to income it turns out that there is virtually no interaction between race and education. At every level of education, there is a nearly identical racial gradient in income in Model 1: English-speaking Whites, Afrikaans-speaking Whites, Asians, Coloureds and Blacks; and nearly the same is true of Model 2, except that poorly educated Coloureds have incomes about the same as those of Blacks while well-educated Coloureds have incomes nearly as high as Asians. While tertiary education mitigates racial disparities in occupational outcomes, it does not reduce the income gap at all.

The story is rather different for women. Figure 10.6B shows that the racial gap in income is successively narrowed with increasing education. One reason for this is that for White women income hardly increases with education whereas the relationship between education and income for non-White women is substantially positive. Two other features of Figure 10.6B deserve comment. First, as I already noted in the discussion of Tables 10.7A and 10.7B, women's incomes are much lower than men's, even among the employed. Here we see that the

[25] Of course, there could well be racial differences in hours worked even among those who purport to work full time. However, data from a national probability sample survey of South African adults that I conducted in the early 1990s reveals small racial differences in hours worked per week among all workers, full time and part time combined: for men, the means are 47.5, 42.6, 42.5, and 43.5, respectively, for Whites, Asians, Coloureds, and Blacks; for women they are 40.1, 40.9, 40.8, and 40.3.

relationship holds net of education and marital status and, in the graph for Model 2, net of full time vs. part time work and employment status as well. Second, note that in the graph for Model 1, the expected incomes of non-Whites with less than secondary schooling, and of Blacks with secondary schooling, are below zero. This is because the interval regression procedure yields estimates of a latent 'income propensity' rather than estimates of actual income. The implication is that non-White, and especially Black, women lacking secondary schooling are some distance from having positive incomes, and that Black women are far from having positive incomes even when they have secondary schooling. These outcomes no doubt reflect the very high unemployment rates of poorly educated non-White women observed in Figure 10.1, together with the substantial fractions of women occupied as housewives (recall Table 10.5B). The result is that large fractions of the population, especially the female population, have no income whatsoever: 32, 51, 44, and 66 percent of White, Asian, Coloured, and Black women, respectively (overall 60 percent), and 10, 18, 23, and 47 percent of men (overall 40 percent).

Figures 10.7 show expected incomes for Model 2 estimated separately by gender and occupation category, except that the model for women in semi- and unskilled occupations is omitted because the estimation did not converge, probably because only a handful of White women engage in such occupations (the coefficients used to generate the graphs in Figures 10.7 are shown in Tables 10.11A and 10.11B). For men, the relationship between education and income is surprisingly constant across racial groups, with one exception: for non-university graduate English-speaking Whites in petty bourgeois occupations there appears to be no penalty for lack of education (although it is important to keep in mind that there are almost no White men with less than a secondary education). For women the story is one of minimal racial differences in incomes, especially among the well educated.

CONCLUSIONS

The legacy of 350 years of *apartheid* practice and 50 years of concerted *apartheid* policy has been to create racial differences in socioeconomic position larger than in any other nation in the world. Whites, who constitute 11 percent of the population, enjoy levels of education, occupational status, and income similar to and in many respects superior to those of the industrially-developed nations of Europe and the British diaspora. Almost all Whites attain at least secondary schooling and more than one-third of men and one-quarter of women secure at least some tertiary education. Few Whites are unemployed and more than one-third are members of the salariat, doing administrative and professional work. Whites also enjoy high incomes and comfortable lives. Although their incomes are low compared to other industrialized nations, so are the prices of local goods; and their incomes are very high by local standards, with the median income of White men equal to the 91st percentile of the entire male population, and the corresponding figure for White women the 93rd percentile.

Within the White population, however, there is a sharp distinction between the one-third of English origin and the two-thirds of Afrikaner origin. As was noted above, the English came to South Africa as an urban commercial and political elite while the Afrikaners began as *trekboers* and then moved into manual supervisory positions in the mines and factories as South Africa industrialized. Despite *apartheid* policies explicitly designed to improve the lot of Afrikaners at the expense of non-Whites, the historical difference between the two groups continues to be seen

in socioeconomic differences at the end of the 20th century: modest differences in educational attainment; large difference in income; and, among men, a substantially greater likelihood that English speakers occupy salariat positions and a substantially smaller likelihood that they occupy manual positions.

Still, the disadvantages of Afrikaners are modest compared to those of non-Whites, particularly Coloureds and Blacks, who bear the brunt of *apartheid* policies. Whereas secondary education is a social minimum for Whites, it is a maximum for Coloureds and Blacks except in exceptional circumstances, with fewer than 10 percent of Coloureds and 5 percent of Blacks achieving any tertiary schooling. For the fortunate minority of Blacks and Coloureds with tertiary education, the likelihood of being employed and the kinds of jobs available differ relatively little from the opportunities of Asians and Whites, but for the vast majority lacking tertiary education the ethnic penalty is very large, particularly for Blacks. Most are unable even to find work, with about 35 percent of economically active Black men and more than half of economically active Black women unemployed, and those who are employed relegated largely to semi- and unskilled jobs. Although tertiary education minimizes racial differences in occupational opportunities, it has little effect on income differences, which continue to be large even among the well educated and even within occupational categories, continuing a pattern documented earlier (Treiman *et al.* 1996). If stratification ultimately is about who has the money, racial and ethnic disparities remained extremely large in 1996 at the dawn of a new dispensation for South Africa. How quickly the balance will be altered remains an open question, but the 150 year post-emancipation history of racial disparities in the U.S. does not offer much hope for optimism.

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TABLES

TABLE 10.1
Socioeconomic characteristics by race/ethnicity and nativity

Race/Ethnicity (Country of birth in parentheses)[a]	Education (Mean Years)[c]	Econ. Active (%)	Unemployed (%)[d]	Non-manual (%)[e]	Salariat (%)[e]	Median income (000's)[f]	% of Population
Whites							
English HL[b] (Gt. Britain)	12.2	80.2	2.9	80.8	56.7	51,481	0.36
Germans	12.9	66.4	3.2	75.8	57.6	50,172	0.10
Jews	12.9	76.2	2.8	87.2	63.8	49,898	0.15
English HL (Other)	12.3	57.5	3.4	79.9	56.3	49,093	0.38
Other Whites (FB)	12.1	67.2	5.0	72.2	54.5	44,293	0.07
English HL (Oth. Africa)	12.4	82.0	3.1	80.1	52.8	43,675	0.27
English HL (SA)	12.2	77.6	4.3	78.3	50.1	41,054	3.61
Portuguese	10.5	72.5	4.0	70.5	43.4	37,092	0.11
Afrikaans HL	11.9	70.4	4.6	68.7	37.5	34,338	7.12
Other Whites (SA)	11.0	62.7	8.3	61.9	35.8	27,356	0.21
Total	12.0	72.5	4.4	72.9	43.5	37,659	12.38
Asians							
Moslem	10.4	62.1	11.7	72.4	40.3	21,051	0.65
Hindu	10.3	66.0	11.6	60.3	31.4	19,217	1.52
Other religion	10.1	65.1	13.0	57.3	29.3	18,016	0.82
Total	10.2	64.9	12.0	62.2	32.8	19,240	2.99
Coloureds							
English HL (Other)	10.6	75.8	13.2	60.6	30.4	21,599	1.28
Moslem	9.4	69.5	18.5	42.2	19.2	15,075	0.63
Afrikaans HL (Other)	7.7	69.8	21.8	25.1	10.6	8,449	7.42
Total	8.2	70.6	20.3	31.7	14.2	10,580	9.33
Blacks							
Pedi/North Sotho	7.4	56.8	43.7	29.7	15.6	8,154	8.15
Venda	7.6	60.0	45.1	33.0	17.4	8,106	1.82
Tswana	7.3	65.8	39.7	27.9	13.7	7,903	8.21
Foreign born	5.2	86.4	14.2	10.1	5.6	7,846	1.64
Zulu	7.0	61.1	45.9	25.7	12.5	7,337	22.01
Xhosa	7.1	58.2	47.6	24.3	12.8	7,123	16.41
Ndebele	6.8	61.7	41.7	19.8	9.0	6,913	1.41
Shangaan	6.8	56.8	42.9	27.3	13.8	6,863	3.48
Other (SA)	7.6	68.9	20.4	25.8	13.7	6,819	1.45
Swazi	6.7	59.6	39.1	25.2	12.3	6,253	2.20
Sotho/South Sotho	7.6	67.4	39.1	23.0	10.8	6,180	7.70
Total	7.1	61.6	42.6	25.2	12.6	7,306	74.48
Race unspecified/Griqua	8.8	62.9	23.7	46.4	25.8	13,821	0.81
Total	7.9	63.9	33.8	36.9	19.8	10,614	99.99
N	1,777,064	1,864,017	1,191,431	704,206	704,206	759,978	1,864,017

Source: All tables are based on tabulations from the 1996 South African 10 percent public use sample and pertain to the South African population in 1996 aged 18-59.

[a] See text for details on how the race/ethnic classification was created.
[b] 'HL' means 'home language', the language spoken most often at home. See note 8.
[c] A "years of education completed" variable was created from the census variable, "deducode," which combines responses to two questions: "What is the highest school class/standard that this person has COMPLETED? (write in)" and "Does (the person) have a technical or artisan certificate, a diploma or degree, completed at an educational institution? If 'Yes', what is the highest qualification he/she has? (first part pre-coded, second part write in)". The conversion of "deducode" categories to years of schooling (and to education levels; see below)) is based on my understanding of the South African education system. Several features are of note: (1) During the period studied, "schooling" in South Africa consisted of two "grades" followed by 10 "standards." This yields 12 years of primary plus secondary schooling. (2) Some people obtain "certificates" or "diplomas" without completing secondary school. I have assigned 13 years to these cases (secondary completion plus one year). This is based on inspection of a tabulation of "field of qualification" by "type of qualification" among those with "qualifications" but less than standard 10, which reveals no systematic pattern, although the bulk of qualifications are technical or unspecified. (3) In South Africa a bachelors degree typically requires three years, and a bachelors degree with honours typically requires four years. Here are the recodes:

deducode	edyrs	deducode	edyrs
01 No schooling	0	13 Standard 9	11
02 Grade 0	.5	14 Less than Std 10 + certificate/diploma	13
03 Grade 1	1	15 Std 10 only	12
04 Grade 2	2	16 Std 10 + certificate	13
05 Standard 1	3	17 Std 10 + diploma	14
06 Standard 2	4	18 Std 10 + Bachelor's degree	15
07 Standard 3	5	19 Std 10 + Bachelor's + diploma	16
08 Standard 4	6	20 Std 10 + Bachelor's + honours	16
09 Standard 5	7	21 Std 10 + Master's degree	17
10 Standard 6	8	22 Std 10 + Doctor's degree	20
11 Standard 7	9	23 Other	-
12 Standard 8	10	99 Unspecified	-

I then created five education categories: no schooling; primary (grade 0 through standard 6); secondary (standard 7 through standard 10, except category 14); some tertiary (categories 14, 16, and 17); and bachelors or more (categories 18-22). Categories 23 and 99 were treated as missing data.
[d] Among those economically active.
[e] Among those employed and with a codable occupation. 'Non-manual' occupations are those in categories 1110-4223, 5111-5113, and 5161-5220 of the 1988 International Standard Classification of Occupations (ILO 1990): Legislators, Senior Officials and Managers; Professionals; Technicians and Associate Professionals; Clerks; and, within Service Workers and Shop and Market Sales Workers, subcategories 'Travel Attendants and Related Workers', 'Protective Services Workers', 'Fashion and Other Models', and 'Shop Salespersons and Demonstrators. The 'salariat' consists of EGP categories I and II (Erikson and Goldthorpe 1992:35-47). See the discussion by Heath in Chapter One of this volume.
[f] Among those employed. Annual income in South African Rand. Respondents were asked to report into what category their current weekly, monthly, or annual income fell, with the correspondence between the three series based on the assumption of year-round employment. Midpoints used by Statistics South Africa were assigned to each category but linear interpolation was used to calculate the medians. On 1 October 1996 (the date of the 1996 South African census), 1 Rand = £0.14 = $0.22.

TABLE 10.2
Distribution of the South African adult population by race/ethnicity and gender

	Male	Female	Total	Percent Foreign-born
English HL Whites	5.0	4.7	4.8	18.2
Afrikaans HL Whites	7.3	6.9	7.1	2.1
Other Whites	0.4	0.4	0.4	38.0
Asians	3.0	2.9	3.0	2.3
Coloureds	9.4	9.3	9.3	0.3
Blacks	74.1	74.9	74.5	2.3
Race unspecified	0.8	0.8	0.8	3.2
Total	100.0	99.9	99.9	3.0
N	892,228	971,789	1,864,017	

TABLE 10.3
Main countries of origin of foreign-born South Africans

English HL Whites		Afrikaans HL Whites		Other Whites		Asians		Blacks	
Country	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**	**Country**	**%**
England	42.1	Namibia	44.4	Portugal	17.2	India	39.6	Mozambique	46.4
Zimbabwe	20.5	Zimbabwe	14.3	Germany	15.4	Taiwan	15.2	Lesotho	29.2
Zambia	5.1	Netherlands	11.1	Italy	6.1	Pakistan	5.3	Zimbabwe	7.7
Germany	3.0	Zambia	5.6	Greece	5.1	Hong Kong	4.9	Swaziland	5.8
Portugal	2.8	England	4.1	Netherlands	5.0	China	4.8	Botswana	2.6
Netherlands	2.1	Germany	3.7	Madeira	4.8	Mauritius	2.8		
		Kenya	2.9	Poland	3.8	Mozambique	2.5		
				Mozambique	3.3				
				Namibia	3.2				
				Switzerland	2.3				
				England	2.2				
				France	2.1				
Percentage of total foreign-born included in list									
75.6		86.1		70.6		75.1		91.7	
Number of foreign born									
16,020		2,676		2,802		1,271		30,597	

Note: Includes countries of origin for two percent or more of immigrants, but excludes residual categories, e.g., "Rest of Africa".

TABLE 10.4A
Educational attainment by race/ethnicity: Males

Highest level completed	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
B.A. or more	15.4	11.8	5.0	1.4	0.7	2.3
Lower tertiary	23.7	21.3	9.1	5.5	3.0	5.6
Secondary	58.3	62.7	67.4	44.4	40.4	43.9
Primary	1.8	3.5	16.4	40.9	39.1	34.6
None	0.8	0.8	2.0	7.7	16.8	13.7
Total	100.0	100.1	99.9	99.9	100.0	100.1
N	29,523	55,703	24,189	76,497	590,278	776,191

TABLE 10.4B
Educational attainment by race/ethnicity: Females

Highest level completed	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
B.A. or more	11.1	9.4	3.3	1.0	0.6	1.7
Lower tertiary	16.8	13.6	6.0	4.6	3.2	4.6
Secondary	69.3	73.0	59.6	43.2	39.8	44.0
Primary	2.0	3.2	25.9	43.8	37.5	34.2
None	0.8	0.7	5.1	7.4	18.9	15.5
Total	100.0	99.9	99.9	100.0	100.0	100.0
N	32,555	60,058	26,337	86,923	693,357	899,231

TABLE 10.5A
Economic activity by race/ethnicity: Males

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
Employed	83.1	81.5	75.7	68.4	45.6	53.1
Unemployed	3.6	3.5	9.6	14.6	25.0	21.0
Homemaker	0.2	0.2	0.3	0.2	0.4	0.3
Student	6.8	5.3	6.0	5.3	16.4	13.7
Other non-active	6.3	9.5	8.4	11.4	12.6	11.9
Total	100.0	100.0	100.0	99.9	100.0	100.0
N	33,773	61,824	25,903	79,337	611,427	812,264

TABLE 10.5B
Economic activity by race/ethnicity: Females

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
Employed	65.8	56.4	40.5	48.3	26.3	32.5
Unemployed	3.0	3.2	6.5	14.8	29.0	24.2
Homemaker	18.9	26.8	37.9	21.8	13.0	15.8
Student	5.6	4.8	5.4	4.4	15.6	13.1
Other non-active	6.7	8.8	9.7	10.7	16.0	14.4
Total	100.0	100.0	100.0	100.0	99.9	100.0
N	35,908	64,762	27,748	89,577	712,939	930,933

TABLE 10.6A
Current occupational class by race/ethnicity: Males

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
Salariat	45.6	31.8	23.3	9.4	6.2	11.3
Routine non-manual	3.5	4.4	5.9	3.4	1.9	2.5
Petty bourgeoisie	8.7	9.1	5.2	3.7	3.2	4.1
Skilled manual	9.0	13.8	10.8	15.0	10.2	11.0
Semi- and unskilled manual	13.9	23.2	24.8	42.6	35.7	33.9
Unknown[a]	15.1	13.6	18.6	8.3	7.5	8.9
Unemployed	4.2	4.2	11.3	17.6	35.4	28.3
Total	100.0	100.1	99.9	100.0	100.1	100.0
N	29,311	52,628	22,113	65,902	432,109	602,064

[a] In some cases the informant did not know the occupation of others in the household. See the text for further discussion.

TABLE 10.6B
Current occupational class by race/ethnicity: Females

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
Salariat	36.5	30.2	21.7	11.3	7.1	11.0
Routine non-manual	28.8	32.4	20.0	10.2	3.3	7.8
Petty bourgeoisie	4.7	3.8	2.0	1.8	1.7	2.0
Skilled manual	1.0	1.4	3.7	3.4	2.1	2.2
Semi- and unskilled manual	12.6	16.9	24.5	43.5	29.8	29.4
Unknown[a]	11.9	9.9	14.4	6.3	3.5	4.9
Unemployed	4.4	5.4	13.8	23.5	52.4	42.7
Total	100.0	100.0	100.1	100.0	99.9	100.0
N	24,682	38,566	13,017	56,454	394,243	526,962

[a] In some cases the informant did not know the occupation of others in the household. See the text for further discussion.

TABLE 10.7A
Current monthly income by race/ethnicity: Employed males

(Cumulative percentage)

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
None	0.8	1.1	0.8	0.7	1.1	1.0
R1 - R200	1.8	2.3	2.1	3.7	8.8	6.7
R201 - R500	3.4	4.0	4.8	18.6	25.4	19.9
R501- R1,000	6.0	7.4	13.5	38.6	49.4	39.1
R1,001 - R1,500	10.9	14.0	32.0	60.0	72.8	59.0
R1,501 - R2,500	19.9	25.7	55.5	78.9	87.6	74.0
R2,501 - R3,500	30.6	39.4	70.8	88.1	93.8	82.0
R3,501 - R4,500	42.7	53.6	80.4	93.4	96.7	87.4
R4,501 - R6,000	58.9	70.6	89.5	97.2	98.5	92.4
R6,001 - R8,000	72.6	82.6	94.7	98.8	99.2	95.4
R8,001 - R11,000	84.3	91.0	97.5	99.5	99.6	97.6
R11,001 - R16,000	92.5	96.0	98.9	99.8	99.8	98.9
R16,001 - R30,000	98.0	98.9	99.7	99.9	100.0	99.7
R30,000 or more	100.0	100.0	100.0	100.0	100.0	100.0
N	26,001	46,193	18,859	52,197	273,908	417,158

Note: Income from all sources, from 1 October 1995 to 30 September 1996, as solicited by the census question. The respondent was invited to respond in terms of weekly, monthly, or annual income, with an equivalence established by assuming that weekly income = monthly income/4.35, and that annual income = monthly income * 12. The exact wording of the question was: “Please indicate each person's income category before tax. Answer this question by indicating each person's weekly, monthly or annual income. Include all sources of income, for example housing loan subsidies, bonuses, allowances such as car allowances and investment income. If the person receives a pension or disability grant, please include this amount.” Recall from Table 1 that on 1 October 1996 (the date of the 1996 South African census), 1 Rand = £0.14 = $0.22. In this and the following table, persons for whom income was unspecified (about 2 percent of Blacks, 4 percent of Asians and Coloureds, and 8 percent of Whites) were omitted.

TABLE 10.7B
Current monthly income by race/ethnicity: Employed females

(Cumulative percentages)

	Race/ethnicity					Total
	English	Afrikaner	Asian	Coloured	Black	
None	1.5	1.6	1.3	0.9	1.5	1.4
R1 - R200	3.9	3.9	3.6	8.7	18.6	13.8
R201 - R500	7.3	7.3	8.8	29.6	47.1	35.6
R501- R1,000	12.4	13.9	25.3	49.2	68.7	53.8
R1,001 - R1,500	21.1	25.9	51.2	70.8	81.4	67.8
R1,501 - R2,500	39.7	49.1	71.7	85.6	89.7	80.0
R2,501 - R3,500	59.4	69.2	84.1	92.8	94.8	88.5
R3,501 - R4,500	74.3	82.4	91.3	96.8	97.6	93.7
R4,501 - R6,000	87.2	92.7	96.7	99.0	99.1	97.4
R6,001 - R8,000	93.5	96.6	98.4	99.6	99.6	98.7
R8,001 - R11,000	96.8	98.4	99.3	99.8	99.8	99.4
R11,001 - R16,000	98.8	99.4	99.7	99.9	99.9	99.8
R16,001 - R30,000	99.7	99.8	99.9	100.0	100.0	99.9
R30,000 or more	100.0	100.0	100.0	100.0	100.0	100.0
N	21,930	33,028	10,773	41,511	183,848	291,689

TABLE 10.8
Avoidance of unemployment, by race/ethnicity and gender

	Males		Females	
Intercept	**-0.18**	(0.05)	**1.50**	(0.05)
Race/ethnicity				
English	0		0	
Afrikaner	-0.05	(0.04)	**-0.13**	(0.04)
Asian	**-0.91**	(0.04)	**-0.96**	(0.05)
Coloured	**-1.19**	(0.04)	**-1.44**	(0.04)
Black	**-2.08**	(0.04)	**-2.98**	(0.04)
Age/10	**1.28**	(0.02)	**2.04**	(0.02)
(Age/10)^2	**-0.15**	(0.00)	**-0.20**	(0.00)
Marital status				
Single	0		0	
Currently married	**1.23**	(0.01)	**-0.07**	(0.01)
Formerly married	**0.40**	(0.02)	**0.35**	(0.01)
Educational attainment				
B.A. or higher	**1.19**	(0.11)	**1.15**	(0.14)
Some tertiary	**0.72**	(0.06)	**1.06**	(0.08)
Secondary	0		0	
Primary	-0.02	(0.06)	**0.43**	(0.08)
None	0.14	(0.12)	**0.92**	(0.15)
Interactions of race/ethnicity and education[a]				
English*education	0		0	
Afrikaner*education	**0.19**	(0.08)	0.17	(0.09)
Asian*education	**0.40**	(0.07)	**0.63**	(0.10)
Coloured*education	0.10	(0.06)	**0.76**	(0.08)
Black*education	**0.26**	(0.06)	**0.66**	(0.08)
N[b]		570,077		503,989

Note: Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.
[a] In keeping with the specifications for the comparative project, the education component of the interaction terms is expressed as a linear variable, coded -2 through +2 for the five levels of education, 'None' through 'B.A. or more'. This treatment of education holds for all the remaining models as well.
[b] Chi-square statistics for the improvement over the 'no effects' model are not shown here because the data are weighted. With weighted data, 'pseudo likelihoods' are estimated by Stata 8.0, the software used in this analysis. But changes in pseudo likelihoods are not meaningful—that is, cannot be interpreted as an indicator of model improvement. Thus, chi-square statistics are not shown in this or the remaining tables.

TABLE 10.9A
Logit Model of Occupational Attainment: Males

	Salariat		Routine Non-Manual		Petty bourgeoisie		Skilled Manual		Occupation unknown	
Intercept	**-1.62**	(0.08)	**-1.52**	(0.12)	**-3.74**	(0.11)	**-1.80**	(0.07)	**-1.20**	(0.07)
Race/Ethnicity										
English	0		0		0		0		0	
Afrikaner	**-0.90**	(0.03)	**-0.27**	(0.05)	**-0.39**	(0.04)	-0.04	(0.04)	**-0.52**	(0.03)
Asian	**-0.98**	(0.03)	0.04	(0.05)	**-0.83**	(0.05)	**-0.15**	(0.04)	**-0.13**	(0.03)
Coloured	**-1.90**	(0.03)	**-0.54**	(0.05)	**-1.37**	(0.04)	**-0.07**	(0.04)	**-1.13**	(0.03)
Black	**-2.12**	(0.02)	**-0.87**	(0.04)	**-1.64**	(0.03)	**-0.58**	(0.03)	**-1.22**	(0.03)
Age/10	**1.02**	(0.04)	0.01	(0.06)	**1.32**	(0.06)	**0.58**	(0.04)	**0.46**	(0.04)
(Age/10)^2	**-0.11**	(0.01)	0.01	(0.01)	**-0.13**	(0.01)	**-0.07**	(0.00)	**-0.04**	(0.01)
Marital status										
Single	0		0		0		0		0	
Currently married	0.02	(0.01)	**-0.08**	(0.02)	-0.03	(0.02)	**-0.07**	(0.01)	**-0.12**	(0.01)
Formerly married	**-0.18**	(0.03)	-0.05	(0.05)	0.04	(0.04)	-0.04	(0.03)	**-0.25**	(0.03)
Educational attainment										
B.A. or higher	**2.04**	(0.06)	**0.43**	(0.12)	**0.78**	(0.08)	**-0.84**	(0.12)	**1.03**	(0.07)
Some tertiary	**1.06**	(0.03)	**-0.22**	(0.06)	**0.72**	(0.05)	**1.15**	(0.05)	**0.47**	(0.04)
Secondary	0		0		0		0		0	
Primary	**-0.26**	(0.04)	**-0.72**	(0.07)	**-0.24**	(0.06)	**-0.24**	(0.06)	**-0.19**	(0.05)
None	**0.50**[a]	(0.07)	**-0.47**	(0.14)	**-0.38**	(0.11)	**-0.84**	(0.12)	**-0.22**	(0.09)
Interactions of race/ethnicity and education										
English*education	0		0		0		0		0	
Afrikaner*education	**0.11**	(0.03)	-0.03	(0.07)	-0.04	(0.05)	-0.04	(0.06)	-0.13	(0.04)
Asian*education	**0.60**	(0.04)	**0.43**	(0.08)	**0.15**	(0.07)	**-0.26**	(0.07)	**0.13**	(0.05)
Coloured*education	**1.28**	(0.04)	**1.01**	(0.07)	**0.35**	(0.06)	**0.20**	(0.06)	**0.53**	(0.05)
Black*education	**1.18**	(0.03)	**0.99**	(0.06)	-.0.09	(0.05)	**-0.39**	(0.06)	**0.15**	(0.04)
N	406,562									

Note: Reference category is semi- and unskilled workers. Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.

[a] Because of the way the interactions are constructed, this coefficient pertains to English-speaking Whites. Only 83 English-speaking Whites are coded as having no education, and 36 of these are coded as having salariat occupations. Although a large fraction of these are in managerial positions, for which education is not strictly required, the results may well reflect error in the coding of education or occupation or both.

TABLE 10.9B
Logit Model of Occupational Attainment: Females

	Salariat		Routine Non-Manual		Petty bourgeoisie		Skilled Manual		Occupation unknown	
Intercept	**-1.97**	(0.09)	**0.48**	(0.09)	**-2.90**	(0.15)	**-3.65**	(0.15)	**-0.91**	(0.10)
Race/ethnicity										
English	0		0		0		0		0	
Afrikaner	**-0.54**	(0.03)	**-0.21**	(0.03)	**-0.51**	(0.05)	-0.00	(0.09)	**-0.50**	(0.04)
Asian	**-0.80**	(0.04)	**-0.80**	(0.04)	**-1.30**	(0.08)	**0.59**	(0.09)	**-0.25**	(0.04)
Coloured	**-1.46**	(0.03)	**-1.54**	(0.03)	**-1.86**	(0.06)	**0.35**	(0.08)	**-1.28**	(0.04)
Black	**-1.65**	(0.03)	**-2.16**	(0.03)	**-1.59**	(0.05)	**0.27**	(0.08)	**-1.49**	(0.03)
Age/10	**1.10**	(0.05)	**0.13**	(0.05)	**0.77**	(0.08)	**0.76**	(0.08)	**0.36**	(0.06)
(Age/10)^2	**-0.12**	(0.01)	**-0.02**	(0.01)	**-0.08**	(0.01)	**-0.12**	(0.01)	**-0.05**	(0.01)
Marital status										
Single	0		0		0		0		0	
Currently married	**0.21**	(0.02)	**0.20**	(0.02)	**0.12**	(0.02)	**0.07**	(0.02)	**0.05**	(0.02)
Formerly married	**0.09**	(0.02)	**0.18**	(0.02)	-0.05	(0.04)	0.06	(0.04)	**-0.08**	(0.03)
Educational attainment										
B.A. or higher	**1.96**	(0.07)	**-0.27**	(0.08)	**0.48**	(0.12)	0.01	(0.26)	**0.91**	(0.08)
Some tertiary	**1.61**	(0.04)	**0.30**	(0.05)	**0.63**	(0.07)	-0.08	(0.15)	**0.25**	(0.05)
Secondary	0		0		0		0		0	
Primary	**-0.65**	(0.05)	**-1.06**	(0.06)	-0.17	(0.09)	**-0.33**	(0.16)	-0.05	(0.06)
None	**0.47**[a]	(0.10)	**0.41**	(0.12)	0.01	(0.18)	**-0.67**	(0.32)	**0.69**	(0.12)
Interactions of race/ethnicity and education										
English*education	0		0		0		0		0	
Afrikaner*education	**0.20**	(0.04)	**0.16**	(0.05)	**0.23**	(0.07)	0.16	(0.15)	0.10	(0.05)
Asian*education	**0.93**	(0.06)	**0.88**	(0.07)	0.25	(0.13)	**-0.57**	(0.18)	**0.52**	(0.07)
Coloured*education	**1.51**	(0.05)	**1.45**	(0.06)	0.15	(0.10)	0.29	(0.16)	**0.94**	(0.06)
Black*education	**1.63**	(0.05)	**1.45**	(0.05)	0.08	(0.09)	0.12	(0.16)	**0.80**	(0.05)
N	294,658									

Note: Reference category is semi- and unskilled workers. Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.

[a] See note a to Table 10.9A. Among White English-speaking women, 90 have no education; of these, 30 are in the salariat.

TABLE 10.10
Interval regression of annual income, by race/ethnicity and gender

	Males				Females			
	Model 1		Model 2[a]		Model 1		Model 2[a]	
Intercept	**-54,805**	(610)	**9,582**	(748)	**-56,184**	(526)	**3,278**	(538)
Race/ethnicity								
English	0		0		0		0	
Afrikaner	**-11,813**	(451)	**-12,689**	(533)	**-9,415**	(288)	**-7,155**	(315)
Asian	**-29,419**	(458)	**-29,370**	(521)	**-19,046**	(331)	**-14,509**	(346)
Coloured	**-35,789**	(423)	**-35,926**	(487)	**-16,164**	(271)	**-18,233**	(284)
Black	**-49,062**	(416)	**-42,335**	(473)	**-29,353**	(266)	**-23,423**	(270)
Age/10	**50,142**	(308)	**20,585**	(339)	**38,825**	(268)	**12,772**	(264)
(Age/10)^2	**-5,880**	(39)	**-2,154**	(45)	**-4,446**	(33)	**-1,439**	(35)
Marital status								
Single	0		0		0		0	
Currently married	**15,211**	(100)	**3,966**	(94)	**-2,111**	(75)	**1,152**	(77)
Formerly married	**5,818**	(266)	**988**	(327)	**6,601**	(119)	**2,601**	(135)
Educational attainment								
B.A. or higher	**54,644**	(1,129)	**50,695**	(1,257)	**28,565**	(740)	**22,642**	(813)
Some tertiary	**19,198**	(553)	**13,998**	(621)	**18,068**	(379)	**8,536**	(407)
Secondary	0		0		0		0	
Primary	**-10,950**	(568)	**-12,463**	(644)	**2,087**	(386)	**-1,837**	(427)
None	**-17,903**	(1,128)	**-19,720**	(1,282)	**8,095**	(762)	**2,499**	(843)
Employed full-time			**7,566**	(129)			**7,275**	(97)
Employment status								
Self-employed without employees			0				0	
Employer			**11,253**	(504)			**3,854**	(433)
Employee			**-868**	(270)			**1,231**	(224)
Family worker			**-4,884**	(560)			**-2,544**	(444)
Interactions of race/ethnicity and education								
English*education	0		0		0		0	
Afrikaner*education	557	(641)	1,120	(724)	**2,115**	(426)	**1,109**	(472)
Asian*education	504	(665)	-641	(751)	**11,551**	(453)	**5,222**	(523)
Coloured*education	-540	(575)	194	(649)	**11,307**	(392)	**7,970**	(431)
Black*education	**-3,498**	(561)	**-3,716**	(636)	**8,353**	(378)	**6,160**	(418)
N	718,354		357,278		814,460		247,953	

Note: Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.
[a] Employed persons

TABLE 10.11A
Interval regression of annual income, by race/ethnicity and occupational category: Males

	Salariat		Routine non-manual		Petty bourgeoisie		Skilled manual		Semi- and unskilled manual	
Intercept	**-48,201**	(3,067)	**-15,303**	(5,850)	6,917	(4,350)	**7,665**	(1,255)	**12,628**	(938)
Race/ethnicity										
English	0		0		0		0		0	
Afrikaner	**-14,015**	(1,016)	**-7,044**	(1,687)	**-10,955**	(2,244)	**-2,472**	(962)	**-3,203**	(839)
Asian	**-34,179**	(1,046)	**-19,637**	(1,649)	**-29,102**	(2,339)	**-16,710**	(947)	**-18,985**	(834)
Coloured	**-38,744**	(956)	**-21,943**	(1,603)	**-40,613**	(2,047)	**-19,490**	(880)	**-24,438**	(774)
Black	**-49,729**	(882)	**-28,916**	(1,578)	**-46,958**	(1,943)	**-26,964**	(859)	**-28,231**	(764)
Age/10	**48,971**	(1,695)	**23,164**	(1,701)	**21,868**	(2,203)	**14,582**	(545)	**12,612**	(283)
(Age/10)^2	**-5,029**	(223)	**-2,311**	(232)	**-2,276**	(285)	**-1,633**	(72)	**-1,362**	(37)
Marital status										
Single	0		0		0		0		0	
Currently married	**7,108**	(476)	**4,206**	(474)	**5,738**	(573)	**3,256**	(161)	**2,751**	(86)
Formerly married	1,519	(1,280)	1,832	(1,449)	1,082	(1,708)	**1,544**	(514)	**857**	(296)
Educational attainment										
B.A. or higher	**41,149**	(1,690)	**32,667**	(5,721)	**30,048**	(5,330)	**34,272**	(4,654)	**34,933**	(3,636)
Some tertiary	**10,701**	(903)	**9,906**	(2,732)	-1,819	(2,628)	**13,374**	(1,332)	**10,042**	(1,621)
Secondary	0		0		0		0		0	
Primary	**-19,801**	(1,074)	**-13,709**	(2,765)	-4,366	(3,049)	**-7,859**	(1,365)	**-10,202**	(1,669)
None	**-23,519**	(2,167)	**-15,886**	(5,618)	3,419	(6,016)	**-13,669**	(2,719)	**-16,590**	(3,338)
Employed full-time	**16,562**	(896)	**8,395**	(912)	**10,058**	(485)	**4,937**	(184)	**5,513**	(124)
Employment status										
Self-employed without employees	0		0		0		[b]		0	
Employer	**20,604**	(1,614)	8,670	(12,962)	**6,280**	(582)	[b]		**9,798**	(1,078)
Employee	-627	(1,046)	5,479	(4,939)	[a]		0[b]		448	(405)
Family worker	**-6,394**	(1,924)	226	(5,457)	[a]		**-2,366**	(835)	**-1,741**	(695)
Interactions of race/ethnicity and education										
English*education	0		0		0		0		0	
Afrikaner*education	705	(1,035)	2,859	(3,349)	4,132	(3,025)	-1,097	(1,506)	**3,930**	(1,872)
Asian*education	-413	(1,184)	-2,106	(3,115)	5,376	(3,416)	-303	(1,547)	-1,146	(1,766)
Coloured*education	-806	(1,035)	-1,385	(2,948)	**8,816**	(2,954)	72	(1,384)	-272	(1,667)
Black*education	-2,894	(915)	-3,576	(2,754)	**4,071**	(2,956)	**-3,741**	(1,358)	-3,132	(1,665)
N	55,305		12,705		21,968		54,897		172,570	

Note: Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.
[a] Not defined for petty bourgeoisie.
[b] Not defined for skilled workers. The omitted category is employees.

TABLE 10.11B
Interval regression of annual income, by race/ethnicity and occupational category: Females

	Salariat		Routine non-manual		Petty bourgeoisie		Skilled manual	
Intercept	**-20,533**	(2,056)	**-12,633**	(3,151)	**7,167**	(3,414)	**19,363**	(3,831)
Race/ethnicity								
English	0		0		0		0	
Afrikaner	**-10,186**	(704)	**-5,424**	(396)	**-6,298**	(2,063)	**-11,461**	(4,288)
Asian	**-14,574**	(917)	**-10,116**	(506)	**-12,004**	(2,682)	**-20,961**	(3,994)
Coloured	**-19,702**	(648)	**-11,240**	(390)	**-19,715**	(1,903)	**-22,394**	(3,896)
Black	**-25,700**	(605)	**-16,533**	(369)	**-25,004**	(1,662)	**-27,505**	(3,925)
Age/10	**23,380**	(1,101)	**16,778**	(806)	**10,795**	(1,849)	**7,035**	(1,028)
(Age/10)^2	**-2,670**	(147)	**-1,903**	(109)	**-1,241**	(245)	**-718**	(141)
Marital status								
Single	0		0		0		0	
Currently married	**660**	(303)	**1,271**	(252)	**1,289**	(453)	**814**	(275)
Formerly married	**4,663**	(539)	**4,268**	(454)	**4,705**	(932)	646	(492)
Educational attainment								
B.A. or higher	**20,107**	(1,172)	**11,469**	(1,549)	**19,369**	(5,474)	15,618	(8,383)
Some tertiary	**5,901**	(624)	**4,007**	(690)	1,684	(2,468)	-1,530	(4,284)
Secondary	0		0		0		0	
Primary	**-5,816**	(824)	**-5,157**	(796)	-1,190	(2,842)	230	(4,260)
None	667	(1,531)	1,711	(1,701)	1,833	(5,590)	2,672	(8,532)
Employed full-time	**17,831**	(536)	**10,619**	(364)	**7,709**	(506)	**4,116**	(417)
Employment status								
Self-employed without employees	0		0		0		[b]	
Employer	**7,402**	(1,391)	4,925	(3,768)	**1,711**	(518)	[b]	
Employee	**3,206**	(798)	3,681	(2,843)	[a]		0[b]	
Family worker	-2,156	(1,576)	-1,339	(2,990)	[a]		2,160	(2,888)
Interactions of race/ethnicity and education								
	0		0		0		0	
Afrikaner*education	**2,249**	(712)	-122	(827)	-1,426	(2,966)	5,340	(4,475)
Asian*education	**2,824**	(938)	1,884	(1,069)	**11,489**	(4,700)	3,555	(4,286)
Coloured*education	**-5,737**	(721)	**3,691**	(840)	**7,792**	(2,913)	4,244	(4,276)
Black*education	**-4,554**	(641)	**4,154**	(736)	**4,687**	(2,775)	3,552	(4,265)
N	46,955		34,354		9,516		9,696	

Note: Emboldened coefficients indicate significance at the .05 level or better; standard errors are given in brackets.
[a] Not defined for petty bourgeoisie.
[b] Not defined for skilled workers. The omitted category is employees.

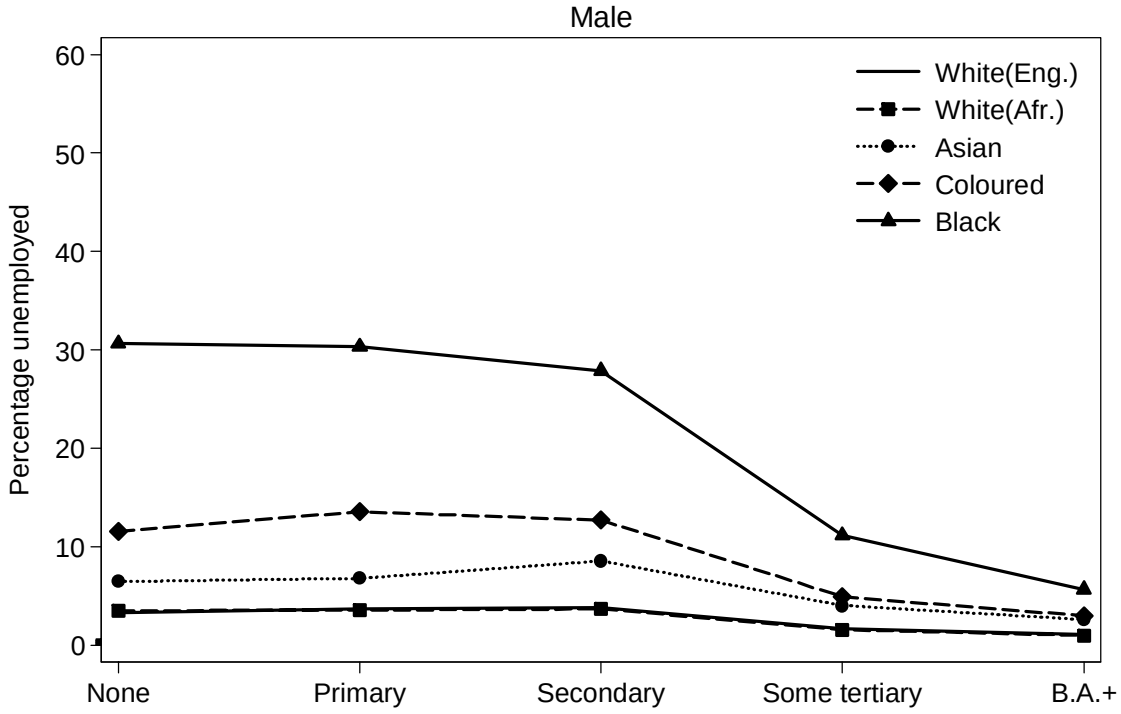

FIGURE 10.1A
Predicted percentage unemployed, by race/ethnicity and educational qualifications: Males

Note: Unless otherwise noted, all figures are for married, native-born South Africans of average age, 1996.

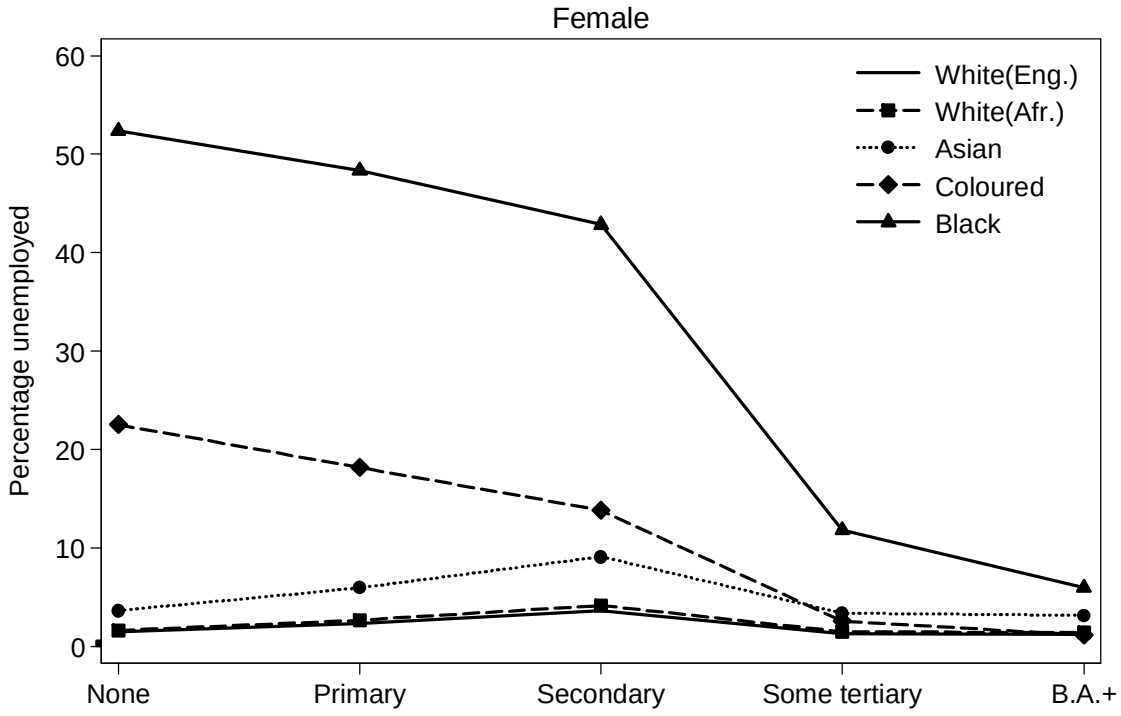

FIGURE 10.1B
Predicted percentage unemployed, by race/ethnicity and educational qualifications: Females

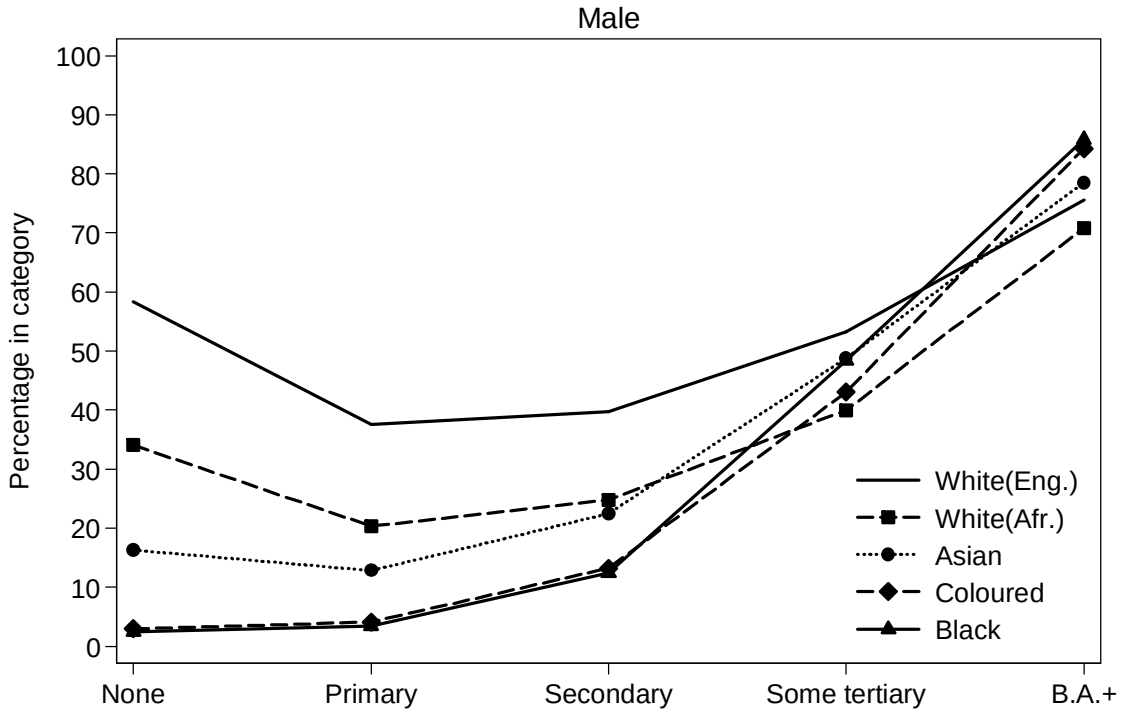

FIGURE 10.2A
Predicted percentage in salariat occupations, by race/ethnicity and educational qualifications: Males

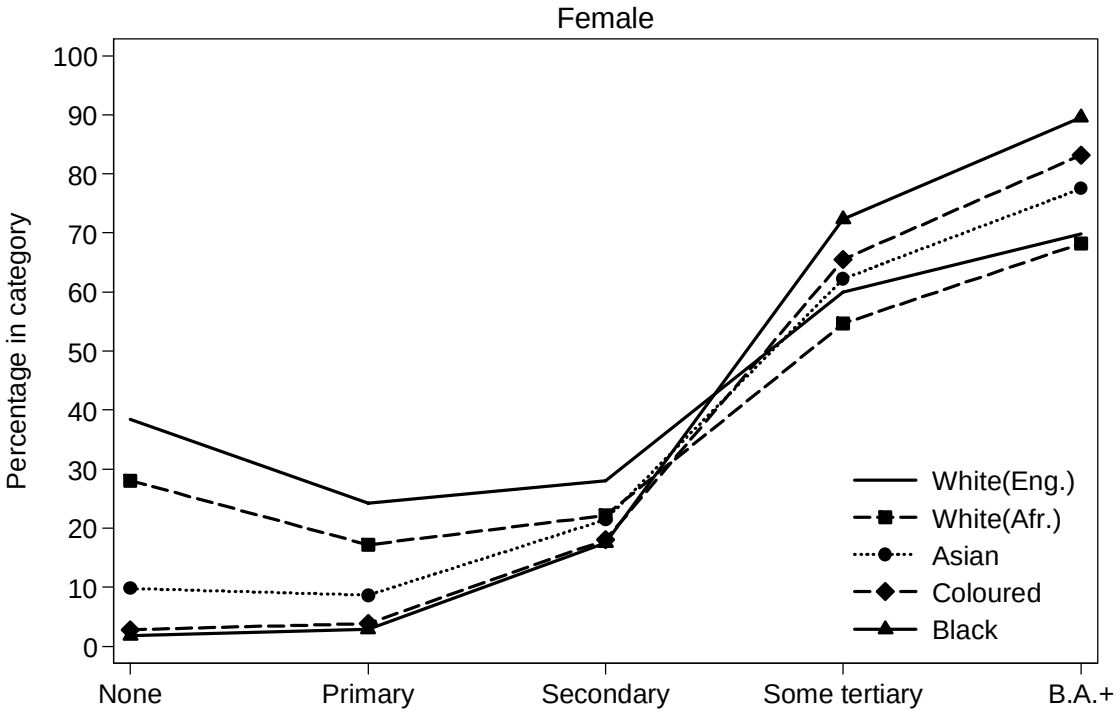

FIGURE 10.2B
Predicted percentage in salariat occupations, by race/ethnicity and educational qualifications: Females

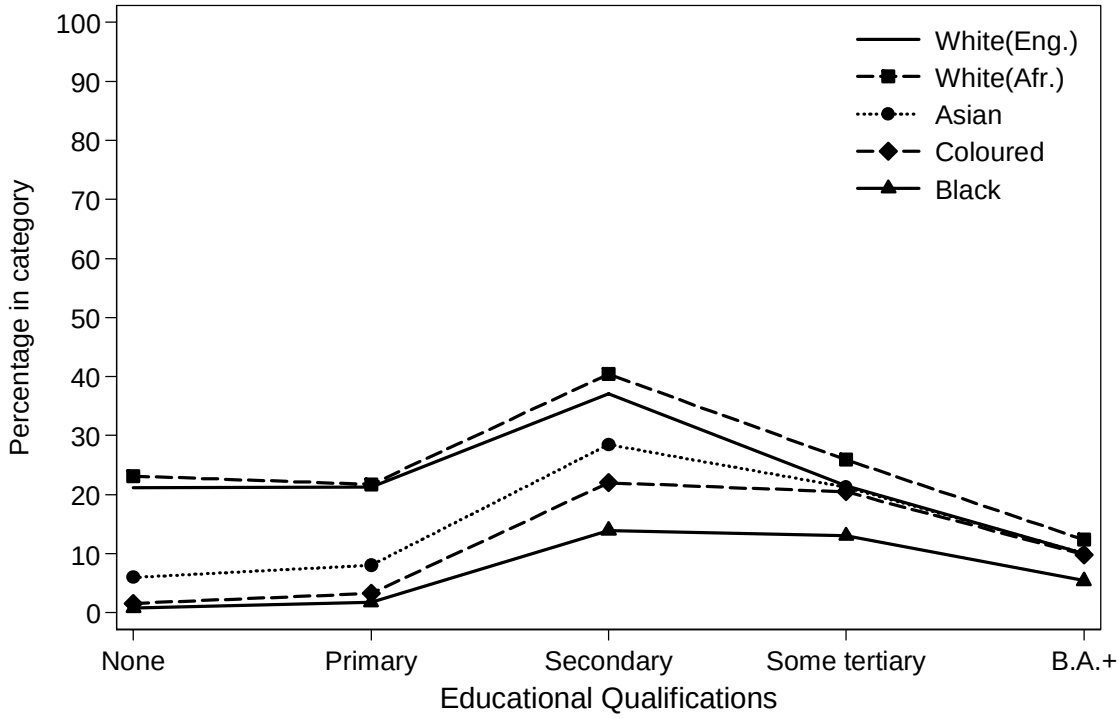

FIGURE 10.3
Predicted percentage in routine non-manual occupations, by race/ethnicity and educational qualifications: Females

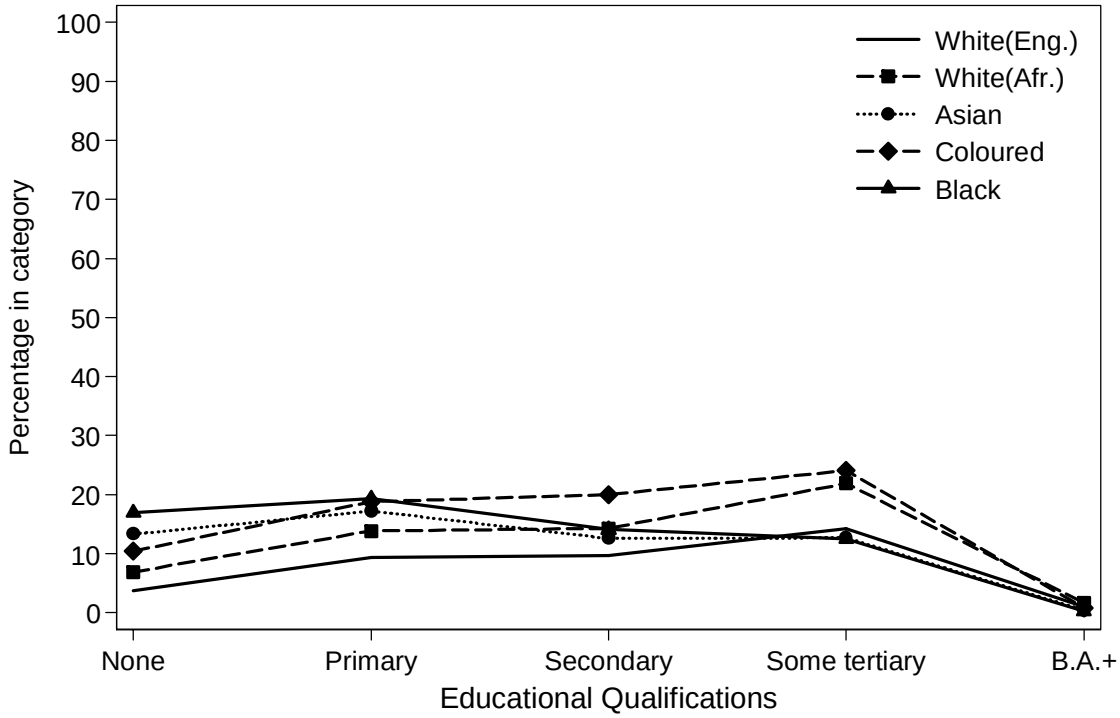

FIGURE 10.4
Predicted percentage in skilled manual occupations, by race/ethnicity and educational qualifications: Males

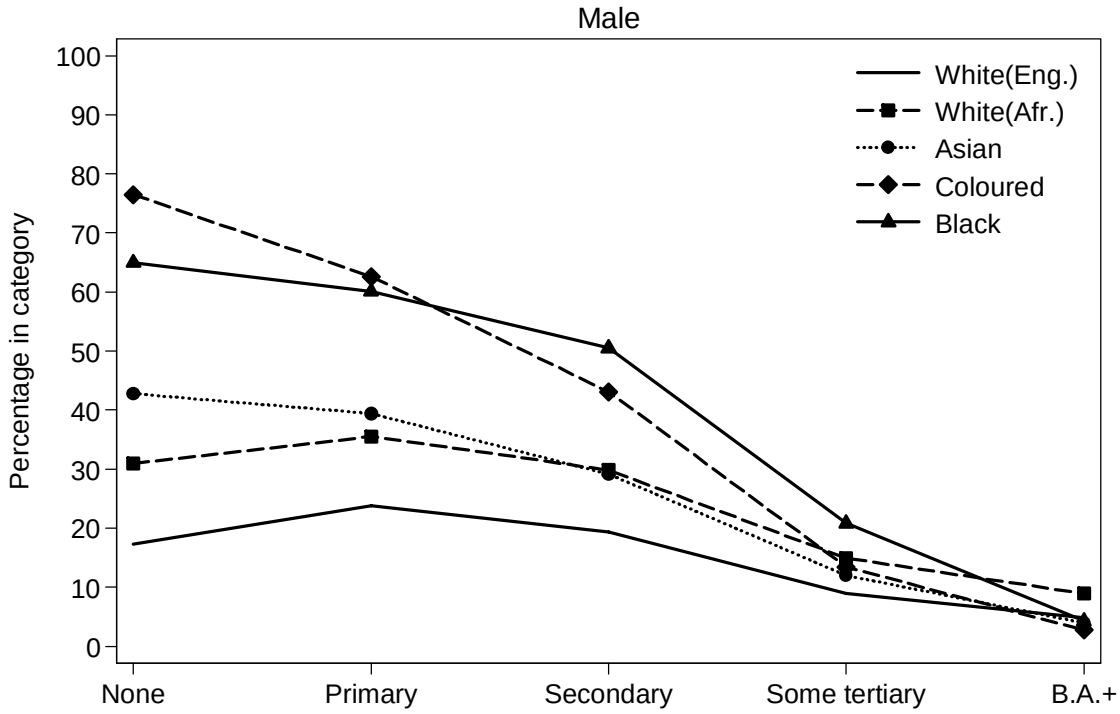

FIGURE 10.5A
Predicted percentage in semi- and unskilled occupations, by race/ethnicity and educational qualifications: Males

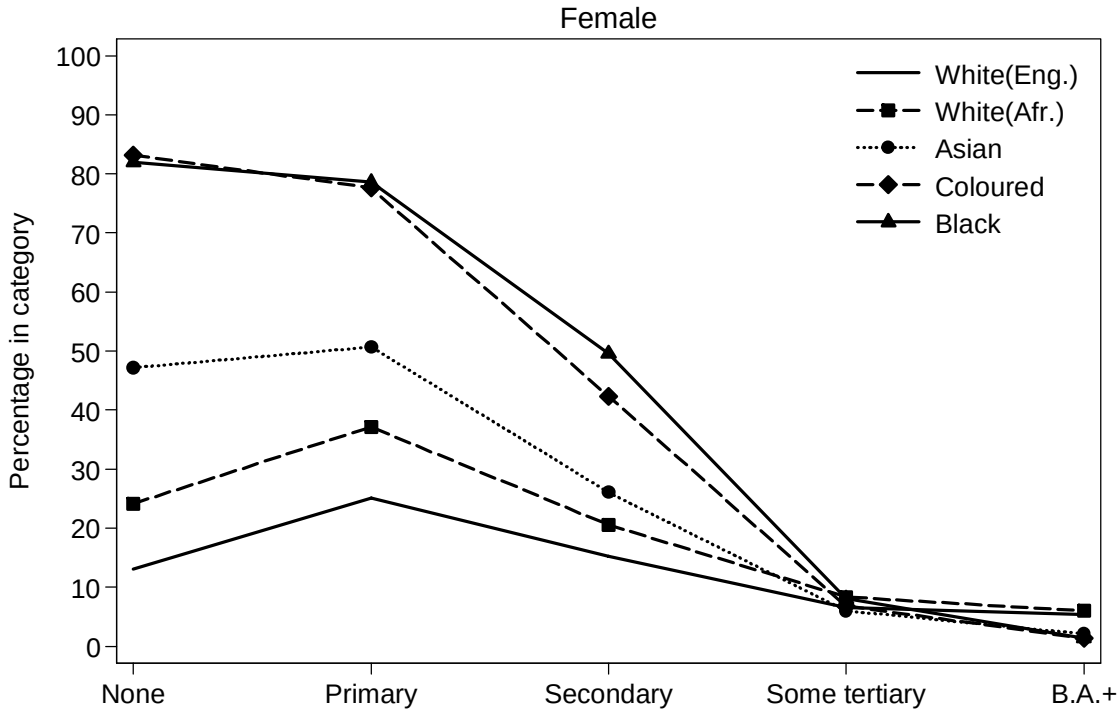

FIGURE 10.5B
Predicted percentage in semi- and unskilled occupations, by race/ethnicity and educational qualifications: Females

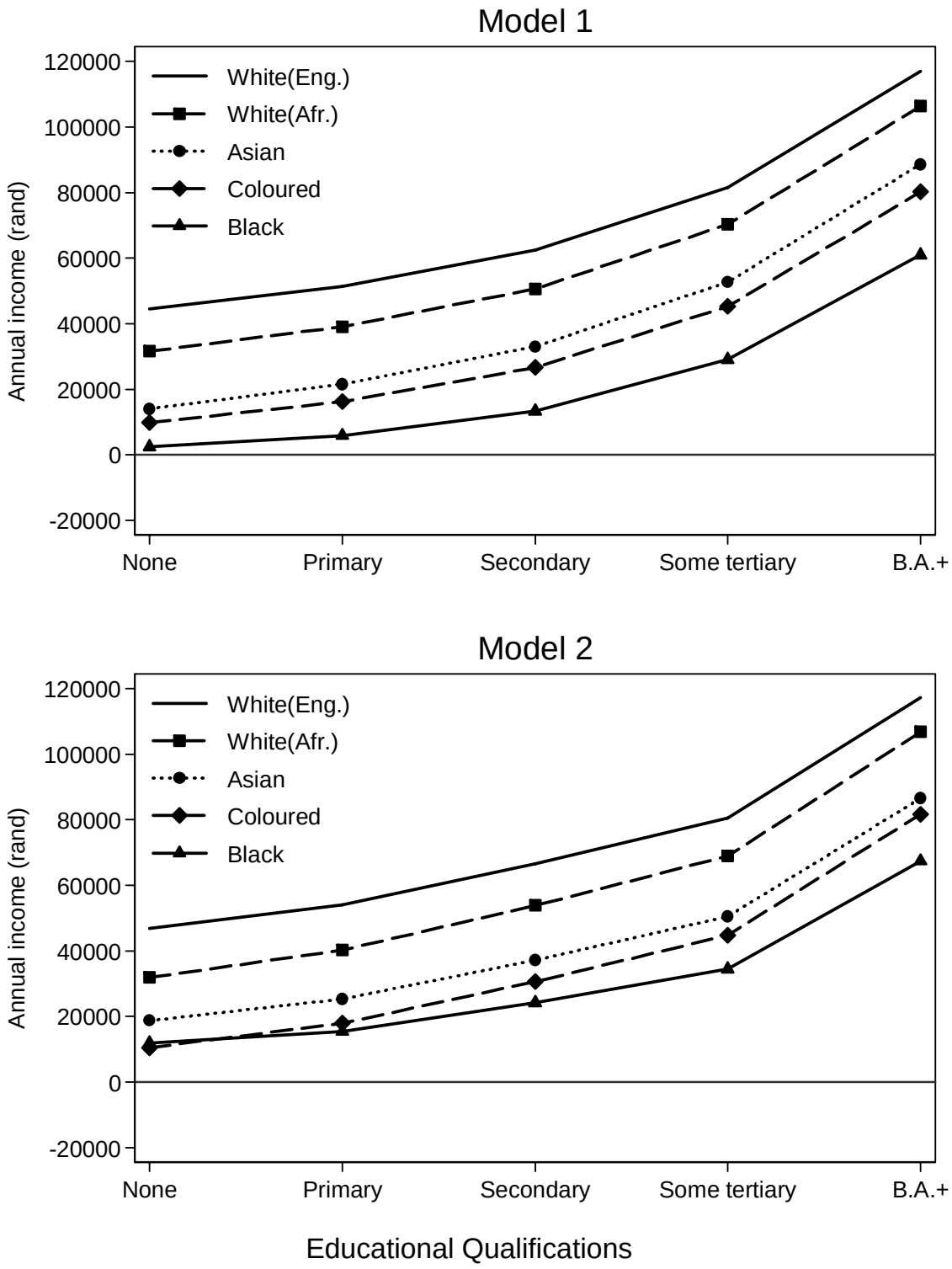

FIGURE 10.6A
Predicted annual income, by race/ethnicity and educational qualifications: Males

Note: Predictions based on Table 10.10 above. Model 1 is estimated for all men. Model 2 is estimated for employed men; the graphs are for full time employees.

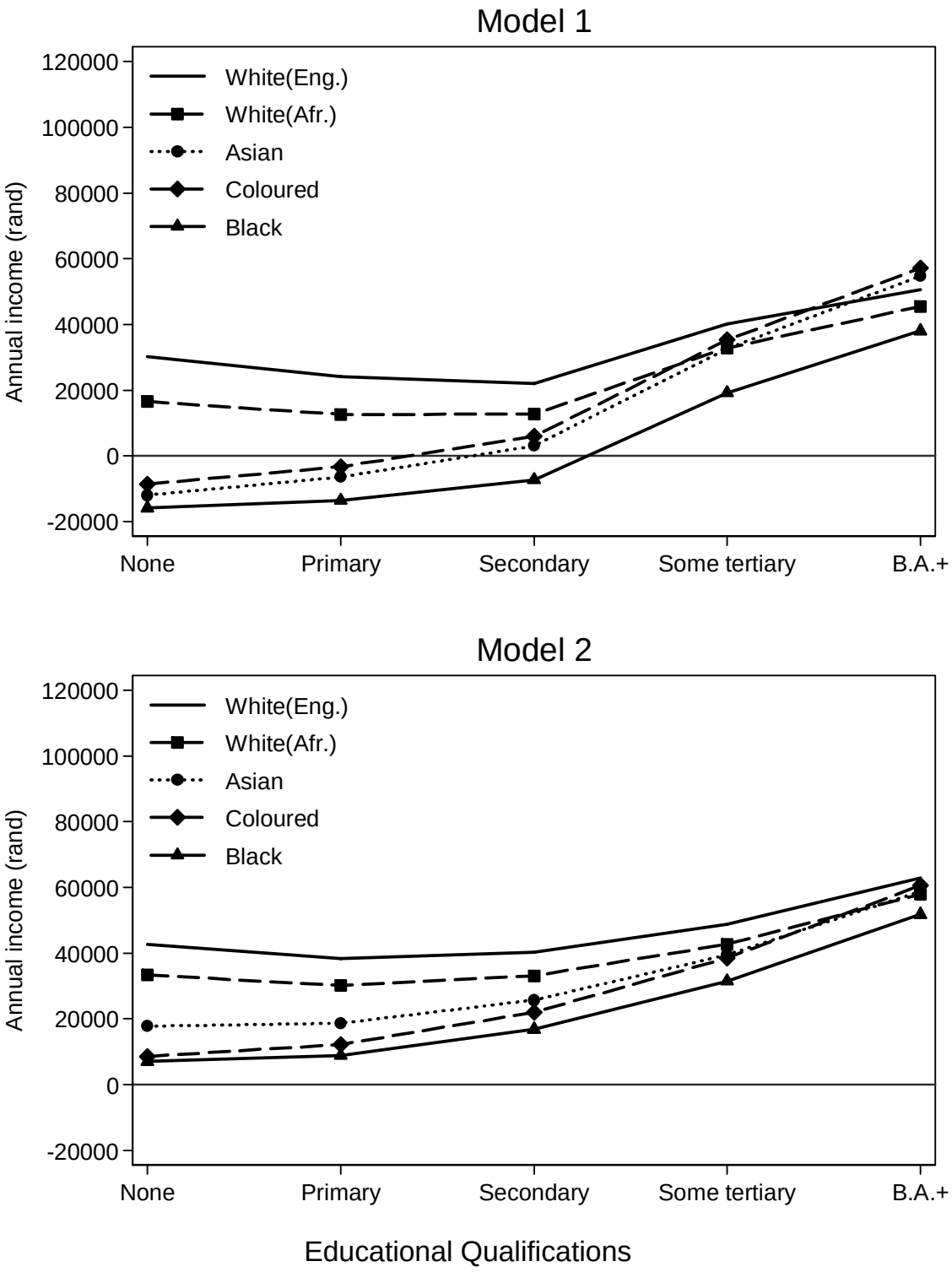

FIGURE 10.6B
Predicted annual Income, by race/ethnicity and educational qualifications: Females

Note: Predictions based on Table 10.10 above. Model 1 is estimated for all women. Model 2 is estimated for employed women; the graphs are for full time employees.

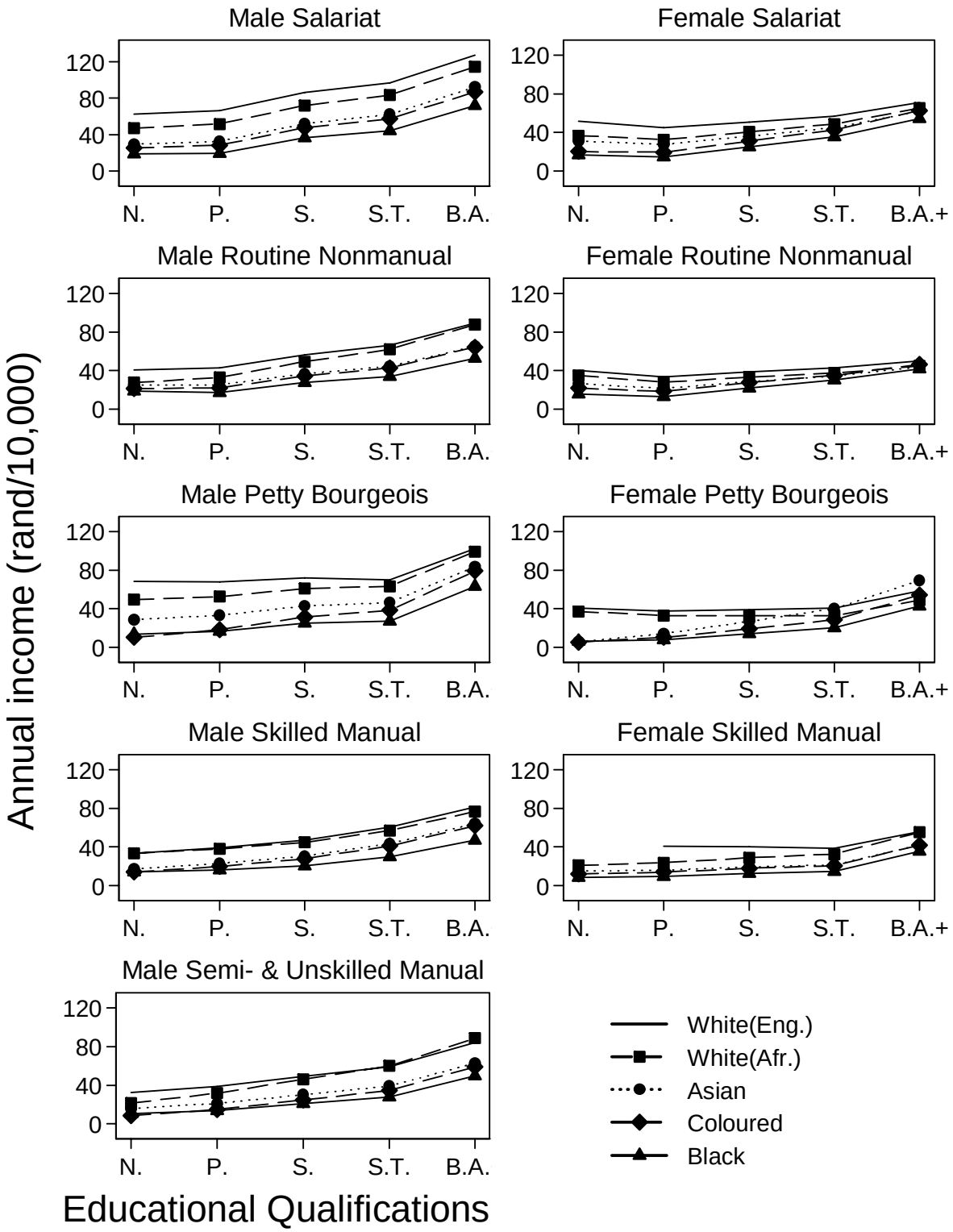

FIGURE 10.7
Predicted annual income, by race/ethnicity, educational qualifications, occupational class and gender