

Race, Power, Performance and Perception: Practical and Theoretical Observations in Higher Education at the University of KwaZulu-Natal

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Abstract

A mixed-methods investigation of the academic performance and perceptions of a cohort of medical students was undertaken. Marks achieved in academic work were analysed in terms of eight demographic factors, including race. In addition a stratified sample of students and staff was interviewed.

Statistical comparison revealed a significant difference between performance by Black and Indian students when measured in terms of race alone. However, when all eight demographic factors were analysed *together*, race did *not* independently influence performance.

Racial differences were ascribed to quality of schooling. Black students experienced financial and family problems to a greater extent than other groups. Indian families set great store by education, expecting excellence. Home background was a universally important influence.

A consequence of the practice of race-based admissions was revealed. Those groups selected in greater numbers displayed a wider range of academic ability and thus would tend to attain lower average marks.

Minority groups were revealed as tending to excel above the majority. While the long-lasting dynamics of apartheid education explain this South African anomaly, Ogbu's socio-historical theory supplies an alternative: 'voluntary immigrants' commonly interact with the educational system more positively than 'involuntarily conquered/ enslaved' groups.

A combination of statistics, personal experiences, and insights from other unequal societies, suggests reasons behind racial disempowerment in education and its manifestation as surrogate for other inequities.

Keywords: Race, Higher Education, quota, schooling, socio-historical theory

Introduction

The black-white score gap does not appear to be an inevitable fact of nature. It is true that the gap shrinks only a little when black and white children attend the same schools. It is also true that the gap shrinks only a little when black and white families have the same amount of schooling, the same income, and the same wealth. But despite endless speculation, no one has found genetic evidence indicating that blacks have less innate intellectual ability than whites (Jencks & Phillips 1998: 2).

This statement, written in America several years ago, reflects conventional wisdom about – and something of the frustration engendered by – oft-observed disparities between the academic achievements of different racial groups. South Africa has its own experience, its own frustrations, its own explanations, and its own proposals as to how to close the gap. Without denying or minimising the gap under scrutiny, it must be noted that the majority of studies are based on performance in schools, and have generally used either quantitative or qualitative methodologies exclusively. Furthermore, in almost every country from which studies have emanated, white students represent the majority, and students of other races the minority. The communities from which students – albeit of different races – are drawn for those studies, although they reflect the changes and insecurities experienced throughout the world at present, have enjoyed periods of relative social and political stability compared to the circumstances obtaining in South Africa and other countries still in a state of flux.

This article describes a mixed-methods study undertaken at a higher education institution in a developing country. It examines the academic performance and personal perceptions of a cohort of medical students. It establishes that, for this group, race was seen by some to be an issue, although for the majority it was not of primary importance; regarding students' assessment marks, race proved not to be a significant factor in comparison with other demographic variables.

Literature Overview

Given that ‘race’ can be defined in as many ways as there are experts on the subject, I have used the term, for the purposes of the study this article describes, in the sense in which the previous apartheid government and the current democratic government of South Africa have categorised the various population groups: Black (of African descent), White (of European descent), Indian (of Indian descent) and ‘Coloured’ (of mixed descent). This is not to condone an arbitrary categorisation made without scientific basis. It is, however, necessary to note that the practical outworking of apartheid included differential expenditure and provision of resources to schools segregated according to the abovementioned conceptions of race. Moreover, the categorisation is still used for the purpose of attempts to redress the racially-based inequities of the past. It is indeed directly from just such a reparative measure that this study, in part, arose.

The Nelson R Mandela School of Medicine of the University of KwaZulu-Natal selects students for its undergraduate medical degree course (MB, ChB) primarily on the basis of the four racial categories listed above. Places are granted to each group in proportion to its representation in the community. A student’s prior academic record is given weight secondary to that of race.

The study undertaken, as part of a doctoral thesis, entailed examination of aspects of student diversity as embodied in demographic characteristics – including race – and whether or not these may have influenced students’ academic performance.

The literature on race and education frequently conflates race with class and/or socioeconomic status. Henig *et al.* (1999), in the USA, document inequalities in the provision of resources by education authorities and in the achievements of scholars subject to these authorities, and a corresponding perception that these inequalities were both racially based and economically driven. Apple (2001: vi), says of political influences on education in the USA ‘People are classed and gendered and raced all at the same time’, noting that to isolate one single aspect is almost impossible. Landry (2007), similarly, claims that race, gender and class may be additive or multiplicative, but not separate, influences on individuals. Alexander *et al.* (2007) and Dixon-Román *et al.* (2013) link race and socioeconomic circumstances in explanations of poor academic performance. Dr. Verwoerd, one of the chief architects of apartheid, evidently linked race and class:

There is no place for [Blacks] in the European community above the level of certain forms of labour What is the use of teaching the [Black] child mathematics when it [sic] cannot use it in practice? That is quite absurd. Education must train people in accordance with their opportunities in life, according to the sphere in which they live (Lapping 1986: 109).

It can be argued not only that racial differences have often given rise to class – and thus socioeconomic – differences, but that apartheid was designed to create, on a racial basis, an economic underclass.

Moving from considerations of social class to those of dynamics pertaining to the classroom, Gibson (1991: 376, 377) urges school teachers,

[T]o convey a sense of positive expectation for individual and group achievement [and to] raise expectations and ... increase knowledge about the options young people have available to them if they persist with their schooling.

However, at the same time, she notes:

Many minority students are reluctant to excel academically if it appears that they are leaving their peers behind [and that] Racial prejudice ... is a major problem for both immigrant and involuntary minority students (Gibson 1991: 377).

Osborne (1997) also refers to the social aspect of schooling, quoting studies suggesting that scholastic success could be related to the extent to which scholars identified with their teachers, and finding that African American boys were particularly prone to ‘disidentify’. This finding is largely echoed – in other terms – by Sontam and Gabriel (2012), Parker (2012), and also by McCain (2010), who takes pains to emphasise that students can overcome racial prejudice. Jenks and Phillips (1998), also pursuing the theme of social influences, debunk the notion that family background accounts for racial differences in academic performance, on the basis that the correlation between biological siblings rarely rises above 0.5, and between adopted children is even lower. Phillips (2012: 7) asserts:

These achievement gaps [between White and Latino or African American students] emerge long before students enter high school, and can be traced to students' experiences both inside and outside of schools.

Paradoxically, but perhaps understandably in terms of low teacher expectations, Harber *et al.* (2012) note that White teachers are apt to give more praise and less criticism to Black and Latino than to White students. While this may operate – consciously or unconsciously – in order to avoid charges of racism, it may have the unwanted effect of failing to provide sufficient challenge to minority students to do better. Brown & Brown (2012) critique some of the widespread deficit-oriented discourses that both express and shape perceptions of racial differences in academic achievement. They also express a paradox – namely that theories which usefully challenge deficit-based beliefs can themselves dangerously entrench negative patterns of thought about African-American students. Warren (2012), writing in the USA's euphoria after having elected an African American to its highest office, warns against assuming that race is no longer an issue in education (and other fields). He contends that racial inequality is still a significant consideration, and that abolishing conceptions of race, under the banner of 'Americanism', deprives minorities of their own racial pride and self-esteem, which buffer the negative effects of racism.

In South Africa, racial differences in academic achievement have been noted at school level (Ball 2006; Bloch 2009) and in higher education (Breier & Wildschut 2006). A number of studies have delineated the social, economic and linguistic backgrounds to such differences (Aldous-Mycock 2008; Christie, Butler & Potterton 2007; Heugh, Diedericks, Prinsloo, Herbst, & Winnaar 2007; Howie, Venter & van Staden 2006; Lam, Ardington, Branson, Goostrey & Leibrandt 2010; Mwamwenda 1995; Simkins & Paterson 2005). As is the case in more developed countries, the apparent racial factor is evidently an amalgam of other influences.

The prevailing view that racial minorities generally fail to achieve the same academic standards as the majority has been challenged. Gillborn and Misra (2000: 21) in Britain, while noting that 'ethnic inequalities persist even when class differences are taken into account' observe that Black children for a time were the most successful group within a particular social class, and that Indian children tend consistently to outperform all other race groups.

Ogbu (1990), interestingly, has investigated minority groups in various countries, and has found minorities, distinguished sometimes by class or caste rather than race, who underperform academically, and, conversely, minorities who outperform other groups. He rehearses the standard explanations – genetic differences, home environment and socialisation, socioeconomic status – but proposes that education is problematic if dispensed in an unfamiliar cultural and/or linguistic environment from that of the home. Dividing minorities into ‘immigrant’ and ‘involuntary’ groups, he suggests that ‘discontinuities in culture, language and power relations’ are not invariably the explanation for groups’ academic performance (Ogbu 1991: 4).

Immigrants who have entered a country seeking a better life view the barriers they face as temporary problems to be overcome, according to Ogbu. He compares these immigrant groups with involuntary minorities who do not see themselves as better off than previously, but rather as worse off than the majority, and feel that the system is biased against them. ‘Autonomous minorities’ – religious subgroups (for example Jews, or Mormons in America) – and refugees, are seen as somewhat different, but he draws a strong contrast between the viewpoints, and interactions with the educational system, of immigrants with positive expectations and ‘those groups that are a part of ... society because of slavery, conquest or colonization, rather than by choice’ (Ogbu 1992: 290). Examination of societies in the United States, Britain, Israel, India, Japan and New Zealand confirmed the role of community forces in differences in academic achievement (Ogbu 2003).

This survey of the literature has not covered the whole of the historical record of theories of racial differences in educational achievement. The convoluted explanations of innate intellectual inferiority once current in the American South, Nazi Germany and apartheid South Africa are as well-known as they are unhelpful. The more itemised, evidence-based contemporary research is more difficult to interpret than bald assertions of racial supremacy or degeneracy, but contributes better to our understanding of a complex phenomenon.

The question arises as to whether findings from other countries would be applicable here in South Africa or not – and if so, to what extent. The majority of such findings are derived from studies in schools; most use wholly quantitative or wholly qualitative methodologies, thus potentially

missing the extent or the detail of what they seek to elucidate. Almost invariably, studies are based on an observation at a particular time, rather than looking for trends over an extended period.

Additionally, in almost every country from which studies have emanated, minority students rarely triumph academically; however, in South Africa and at this medical school, minorities are high achievers.

This country also represents a society in ferment, with learner communities that embody a degree of diversity and transformation unlike those relatively stable societies in which previous studies have been performed. It thus seems appropriate to report on a mixed-methods study performed in a South African medical school in the 21st century.

Methods

While working in an interpretive paradigm overall, I used both quantitative and qualitative methods, in order to explore the extent of the influences on students' learning and to investigate students' and teachers' perceptions of those influences.

The first-year medical students in 2007 were followed for the duration of their five-year course. To allow representation of developments over that time, and to enable direct comparisons of assessment marks, those students who fell out of the cohort and repeated a year with a subsequent cohort were not followed further; nor were those who had failed a preceding year and then fell into this cohort.

These students' assessment marks were gathered, collated in an Excel® spreadsheet, to which was added a number of demographic characteristics suggested by the literature to be of potential significance, and the whole was rendered anonymous. The following demographic features were included:

- Sex
- Age in 2007
- 'Race' (categorised according to the apartheid system: Black / White / Indian / Coloured)

- First language
- Academic status (fresh out of school / repeating 1st year / higher education experience / graduate)
- High school (categorised by socioeconomic quintile¹)
- Source of finance (self or family / scholarship or bursary / NSFAS² support)
- ‘Matric points’ (UKZN ranking system on school-leaving examination marks)

The spreadsheet contents were uploaded into SPSS®, v19, for statistical analysis. The general linear model (GLM) – a form of ANOVA applied to multiple observations (Field 2009) – was used to compare students’ marks in various separate categories, for instance sex, race, etc. To compare the interaction of demographic features taking all eight into account, a generalised estimating equation (GEE) was used. This is similar to linear regression modelling, but like the GLM allows for multiple observations over time (Hardin & Hilbe 2008).

In 2009, when the student cohort under study was in the 3rd year, a purposive sample of 19 students, representing a spread of the demographic features listed above, and six of the teaching staff, representing medical

¹ An indication of the socioeconomic status of the community surrounding the school – used by the government in calculating differential funding of schools based on ‘income, unemployment rates and the level of education of the community’ (http://www.create-rpc.org/pdf_documents/Policy_Brief_7.pdf).

² The National Student Financial Aid Scheme of South Africa was established in 1999 ‘to ensure that students, who have the potential, but cannot afford to fund their own studies, will have access to funding for tertiary education’ https://www.nsfas.org.za/web/view/students/student_home/studenthome).

scientists and clinicians, was interviewed. They were asked to comment on a series of graphs showing previous students' marks depicted according to similar demographic characteristics. These interviews, after transcription, checking, and being rendered anonymous, were analysed thematically, using Nvivo®. This article reports on the aspect of race alone. (Other aspects are discussed elsewhere; cf. Sommerville 2012.)

Results

Over five years, the 202 students in 1st year in 2007 gradually dwindled to 148 students in 5th year, of whom all but one graduated in 2011, having sat 32 assessments along the way.

Of the original 202, 112 could be categorised as Black (55.4 %), 70 as Indian (34.7 %), 11 as White (5.4 %) and 9 as Coloured (4.5 %).

As regards race, students' marks overlapped over the course of their studies (see Figure 1 below).

This in itself denotes a change from a previous (unreported) study, in which a clear difference of *ca.* 10 % separated Black and Coloured students from Indian and White.

The graph also shows over the five-year period a narrowing of the initial differences of *ca.* 5 % between lower and upper groups.

Despite the overlap, GLM analysis showed significant differences ($p < 0.001$), which on post-hoc testing proved to be between Black and Indian students.

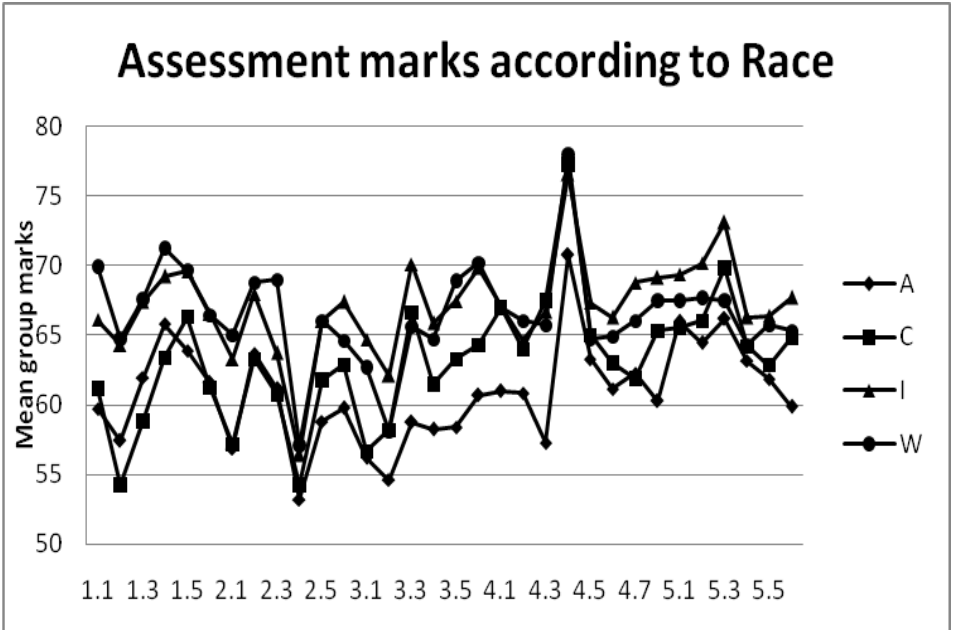


Figure 1 Assessment results over five years according to the race of the students

A = Black African
C = Coloured
I = Indian
W = White

Axes: x: Successive assessments from 1st to 5th year
y: Average marks (%) per group at each assessment point

Respondents made various comments about the apparent racial differences in assessment marks. They generally rejected the idea that race itself accounted for the differences seen in the stimulus graph.

I think it's all based on your social background and not at all on skin colour (Osane 6:893 – 894).

I don't think it's all black and white, as you say, because some people have high-achieving parents and family members, and then in fact they'll be so well off that they'll say 'I don't need to work hard, this is my life, I'm sorted out' and then others, who have maybe not so high-achieving parents, and they're struggling, and they're like 'I'm not going to struggle like this in my life; I'm going to work hard and get a good job and earn enough money to be comfortable'. So I think it's a very broad spectrum (Bala 6: 896-900).

And it's also dependent on the raw material – the ore that's coming through from high school. I don't mean in racial terms; I mean in general terms (Patel 12:914-916).

Patel was not the only respondent to ascribe racially-perceived differences to education.

Children that are going to these Model C schools and that do form part of the black community – they have it easier, I guess, and it's not that much of motivation. You know you've got back-up; you know you have your parents that are doing certain things for you and those who are in the rural schools, they really need – they would take any chance to get out and do something with themselves so that they can bring something home (Zodwa 1:626-630).

Well, the obvious thing here is the difference in the education and background and where we come from (Lungi 3:575-576).

Lungi, as she raised the aspect of schooling, at the same time implied that there is more to the differences than schooling alone.

[I]f there's one thing I like about the Indian culture it's – they have more of a *ubuntu* spirit than we actually do, and we're supposed to have it. They'll have the uncles or the aunts who're the doctors who will come in and help the nieces and the nephews – you know, they

have that togetherness thing, which would explain why they succeed so much.

And then you get me where I go home and my mother works at Checkers and she doesn't know anything about medicine and I need to figure it out and see in the textbook (Lungi 3:755-758, 782-784).

Kathrodia echoed the thought that the commitment of different communities to schooling was different.

My mother-in-law was such a typical Indian old lady; now, the kids *had to go to school* (Kathrodia 10:448-449).

Patel speculated on the nature of the Indian community's emphasis on education.

[A]partheid was actually protecting them, ensuring the maintenance of their culture, traditions, home values, language, religion and racial purity.

Indians came here to work under appalling conditions akin to slavery. But one thing they did was, they ensured, with no support from the government at the time, that they educated their offspring (Patel 12:906-907; 1024-1025).

As regards negative influences, Hlubi attributed different levels of achievement to different amounts of academic effort; however, he granted that African students might have more difficulties than other students.

I don't think an average African student doesn't understand when they read a book on diabetes, or goitre, but I think it depends how frequently that student has been to the library or has looked at the book. I think that's more important than – er – but why they haven't been – they haven't done the reading is the question. Is it because they've got other issues that they're thinking about or not, or is it because they are having an easy time? I don't know; it's difficult to say (Hlubi 13:457-462).

Susan voiced a similar thought.

[I]t might also have to do with other responsibilities and things as well. [Mm-hm] Indian families and whites tend to have less responsibilities because they're more well off (Susan 1:599-600).

The matter of language was raised as a possible contributor to racial differences.

[W]e Indians don't go for English classes. You know what I mean? [Mm] I mean you get a lot of people who are black that go for these English classes. So it's a problem – that means what I'm reading and what they're reading is two different things (Ahmed 2:420-422).

Look, we all understand English but – um – I think for someone coming from a more rural area, who's just grasped the concepts of English, to do medicine, which is like another language itself – there's no way you don't experience difficulty (Lungi 3:585-588).

Despite language being an obvious hindrance to many Black students, it was generally felt amongst Blacks *not* to be a major problem – as Lungi said, the technical discourse of medicine was more of a problem than was the language of teaching and learning. Hlubi pointed out that all of the students had a degree of proficiency in English, and Zulu speakers unanimously concurred with Lungi that they would find it more difficult to learn in Zulu.

I don't think that is a problem. [Mm?] I think the students have been conversing in this language from high school. Most of them – *all* of them have been learning in English, although it may not have been their first language (Hlubi 13:71-73).

But it's not to say that you want to change everything in Zulu because I promise you even all of them would not agree because Zulu's actually a very difficult language in terms of writing. Speaking is easier (Lungi 3:616-618).

Considering apparent racial differences in purely numerical terms, rather than those of social, motivational, school, family support or language, Ahmed, pragmatically, referred to the medical school's racial quota system of selecting students. This automatically ensured that those race groups comprising relatively small numbers, chosen from the top of the academic listings, would tend to achieve better academically. Those race groups comprising larger numbers – also selected from the top down – necessitated reaching further down the list ('more variability'), resulting in the likelihood *ab initio* that their achievement would be lower ('not challenging on the same level').

There's only a handful of whites in my class, so when they qualified from matric – what was their category of pass? Did they get an A+ pass and come here say ... and did that guy, because he was allowed more variability, he came with a B pass. So they're not challenging on the same level (Ahmed 2:428-432).

After pointing out an unexpected negative effect of the quota system, Ahmed went on to suggest that racial differences might arise from students' childhood backgrounds. Others also suggested that students' upbringing influences the way they think.

And so – where does the problem start? Right down when you're small (Ahmed 2:506-507).

You can say that the white students get somehow an unfair advantage over the black students that are coming from – not just school-wise but – um, just the way of thinking – how you were raised (Zodwa 1:571-573).

In a black family, the child is essentially on their own because half the time the parents are not educated themselves, like my parents weren't educated, to follow me up and to say 'Have you done this? What needs to be done? Do you need extra lessons?' You know – no facilities to go for extra lessons; so you're on your own from that culture (Lungi 4:762-766).

So maybe, maybe it's our background but for, for me it was a lot of, a lot of hard work that I had to do, to start understanding these things (Mandla 4:277-278).

[S]chools do play a role in all of this, but I also think it's the setting and mindsets of the different ethnic groups that do really play a role because you may find that – um – a black person from a rural area, they get into varsity and they're now in the same class as a white person, and they've never been in class with a white person, and suddenly they become intimidated for no reason, and all that stuff (Mbali 6:858-861).

Hlubi revealed something of these issues in his perception of relatively well-resourced schools but resource-poor homes.

[S]tudents will be given assignments by the school, while they're still at school, before they even come to university; now *these* [White, Indian] will go home and look at the newspapers, look at the internet and look in the library and do their assignments and be better prepared; *these* ones [Black] will go back to the township, although they are studying in a Model C school, which is a good school, but they go back to the township; it's not easy to get a newspaper, no computers, no Internet therefore, and no libraries, so *these*, it wouldn't be so easy for *these* to prepare that assignment than *this one*, therefore *these* will be better prepared for university than *these* (Hlubi 13:496-502).

The range of opinions on what appear to be race-based differences in achievement mirror the spectrum revealed by the literature on race and education emanating from elsewhere in the world.

Moving from respondents' direct statements about race, a number made remarks that were significant in terms of the race of the speaker. Just as Bala, an Indian student quoted above, said 'I'm going to work hard and get a good job and earn enough money to be comfortable', so other Indians provided glimpses of their underlying thought patterns.

[W]hen the Indians arrived here in South Africa in 1860, what they

came as? They didn't come as immigrants, or getting away from turmoil in their country, they came here as indentured labourers (Patel 12:1019-1021 [Indian]).

Orientalists were doing far better than the local indigenous [Australasians] ... why the Orientalists were doing better was because, number one: they had excellent parental support and family support; number two: they spent an inordinate amount of time – longer than the other students – doing their homework and tuition and so on; and thirdly: they were regular attenders at schools and formal activities (Patel 12:1019-1021).

HoD³ schools – I can talk for them – they are generally the ones that are living in the townships. They don't have the money; they go into school and they are very high achievers in terms of academia, because that's the only thing that they have (Kathrodia 11:533-536 [Indian]).

A number of Indian respondents spoke of the impulse of that group to come to South Africa originally to seek employment and, once here, to better their lot through the only means open to them. They were also aware of one of the necessities of striving for a better lot: the importance of the individual's attitude and his/her family and community's support.

[T]hose people who are high achievers, no matter what type of system there is, they're going to try and achieve up above whatever the bar is set at, and those that are lower achievers, no matter what the system tells them, they're still going to be below the bar that's set for them. So it doesn't – I don't think that changes – um – the dynamic of whether that person's going to do better because of the different system they're in; it's coming from – stemming from the attitude of the person in the first place (Bala 6:924-928).

³ House of Delegates – an experiment in the last years of apartheid with separate parliaments for Indians (and Coloureds: House of Representatives) who controlled their own schools.

No, no; it's not the school, it's the parenting: a lot is on the parenting; a lot is on the family background. This is why I'm saying that if I look at the difference in the [Blacks], and my own experience will tell me the backgrounds that these youngsters come from are so horrendous that it disadvantaged them: lots of them have to go and work to educate themselves; to buy themselves the basics, you know, part-time: weekends; after hours – they have to work because they come from very very difficult backgrounds in terms of family upbringing. It's not just the schools; you can put them in the best of schools, but if they don't have the family support, the parenting support, the community support, etc. (Kathrodia 11:603-610).

This awareness was reflected by members of other groups.

[I]f you live in a lower economic state and I can say you are either conscious to work harder like they were saying, or you just stay where you are as well. It depends on the individual, and family, and a lot of stuff (Mbali 6:908-910 [Black]).

However, in startling contrast to the outlook of Indian respondents was another comment by the same student, Mbali, who was struggling academically.

Well, another thing about black people I notice is that it's not that they're not smart in life – they're just lazy, and it's – it's a – like ... we're that way because – ah – we expect things to be done for us. [D'you think so?] I'm generalising – yes I think so; I think black people are just less interested, and generally are just lazy beings – not all of them, but I think it's a trait that maybe most of us have: just generally lazy and we expect things to be done for you – the government this, the government that – whereas white people I think – I think it's – it may have to do with the apartheid system when they grew up having the best, they know they're the best, they're taught at home that they are the best (Mbali 6:868-874).

Another Black student related a contrast of a different kind: that between traditional beliefs about healing and those to which he was now being exposed.

[J]a, that part of the abdomen which was painful was like scarified by *umcabo*⁴ – by *umcabo*. So it's kind of like, you know – for me it was like OK, some, some of the things that traditional medicine has taught me as I was growing up are in conflict with what western medicine says, you know. So to some areas it adds to general knowledge and to some areas it brings conflict you know (S'bu 4:260-264).

It was generally Black students who expressed a relatively passive role in the small-group discussions that form an important part of their course.

I really really do think that the facilitator has a pivotal role to play, in the sense that – I mean, we could wrestle out what we know from rote learning, but it's up to them to actually like pursue that knowledge and actually see if we do understand it (Vusi 6:42-46).

I just feel as if there isn't some sort of – I wouldn't – there's no alarm bells; there's no buffer system that would help someone like that in terms of them – challenging them to get rid of their – for the sake of a better word – bad habits (Vusi 6:71-73).

[S]he will motivate you from first day you met her until the last day of your theme (Sipho 6:89).

I think teachers will help to guide you as a person how much do you – how much work do you need to know for how long (Sipho 6:382-383).

⁴ *Umcabo*: the tradition of making incisions in the skin over an affected part of the body and rubbing in herbal material.

Black students also experienced extremely negative interactions with clinicians in the wards.

[I]t's like there's that thing that you need to know that there's – you need to know that [You're small] that you need to know that you're a medical student; you need to know that I'm a consultant (Keketso [& S'bu] 4:649-651).

[W]hen maybe [the consultant]'s asking something, then we answer the question, then he or she says 'That is bullshit'; then that is when you see yourself 'No, I'm inferior' (Sipho:637-638).

In the face of all the perceived advantages and disadvantages of belonging to a particular 'race' group, when the parameter of 'race' was entered into the GEE and compared with the seven others, it disappeared as a significant influence on learning ($p = 0.376 - 0.713$ for different race groups).

Discussion

Examined in isolation, these students' racial groupings – however crude and unscientific – appear statistically to relate to their assessment marks. However, the literature, respondents' comments, and comparative analysis taking other factors into account, all refute that initial impression. 'Race' may subsume a wide range of other factors, but is not *per se* a significant factor.

The variety of respondents' opinions on the effect of students' race is remarkable: from those who averred that race was not itself an influence on academic achievement to those who felt that particular races had advantages which contributed to their better performance. It does appear that Indian families particularly appreciate the benefits of education and that their children have a corresponding drive to excel. This perhaps corresponds to the finding in Britain that Indian children do well compared to other race groups. The lower average marks of Black students may reflect the fact that the quota-based selection implies that their larger number yields a lower average.

There was a sense in which education and family and/or community effort interacted. The resources available to students were seen as lying within the community – provision of libraries and schools of an acceptable quality – and the family – being able to afford a more privileged school, easy access to books and computers, establishment of an intellectually encouraging home environment, and coaching by healthcare professionals from the wider family.

Motivation also appeared to act at various levels: for example, an individual's drive to succeed, a family's pride in the first member to reach higher education, and a community's sense of a member being able to make something better of himself/ herself.

Some shades of opinion seemed to vary according to the speaker's race. Indians spoke of coming to South Africa to work, and of improving their lot through education. One Black spoke of a sense of reliance on the government to provide facilities, another of the clash of cultures; others of reliance on their small-group facilitator to guide them, and still others of being demeaned by certain consultants. (Although not quoted here, White students were aware of their privileged position in comparison to others; the single Coloured student interviewed regarded himself as privileged relative to others of his 'race'.)

With reference to these seemingly race-specific perceptions, Ogbu's socio-historical theory (1992) is helpful in understanding their basis. Ogbu relates the achievements of different groups to optimistic or pessimistic interactions with the educational system (Gibson 1991; Ogbu 1991). Whites, Indians and Coloureds represent minorities in South Africa. Ogbu's theory would regard Whites as a voluntary (immigrant) minority (and of course it was their educational system that was imposed on South Africa). In terms of their initial entry as indentured labourers, Indians would, I suggest, also be thought of as a voluntary minority. Coloureds, having originated from settlers' liaisons with slaves, would be regarded as an involuntary (enslaved) minority. Blacks too would be regarded as an involuntary (conquered) minority (that is to say, a 'minority' in terms of power, not numbers). This classification, while counterintuitive with respect to the relative size of each race group, helps to explain the academic ascendancy of Indian and White students over their Coloured and Black counterparts. It also goes some way to explain the sense of disempowerment conveyed by some of the Black respondents.

That student diversity may in fact offer the possibility of stimulating transformative learning (in Mezirow's terms) has been explored elsewhere (Singaram & Sommerville 2011). Small-group learning has been used in the medical curriculum as a means of throwing together students who might, if left to their own devices, have separated out into enclaves of race, or geography, or wealth (noting that in South Africa, these divisions may well overlap to a large extent). We deliberately mix the composition of our small groups, and students have commented on their surprise that The Other is at least bearable, at best a source of expansive and unexpected learning. In training the facilitators who guide these small groups, we make the point that process is as important as product. We try to equip facilitators with the insights and the skills to help them deal with the disparities in their groups and to assist students in dealing positively with conflicting viewpoints and opinions.

The proportions of the different race groups in the cohort under study resulted from the medical faculty's conscious selection of students according to a quota system that seeks principally to represent community demographics, rather than being based on academic ability. While the logic is currently unassailable that a quota system guarantees that those groups that are numerically larger will include a wider spread of abilities and thus a wider (and lower) range of marks, this need not be so in perpetuity. If all the schools in the country were offering equal educational value, the pool of scholastic ability in the larger race groups should be expected to be wider, not deeper. There should eventually be many more top achievers in the Black pool than, for example, in the Indian pool, proportionate to the relative sizes of each. To fulfil the Black quota would no longer require dipping *deeper* into that pool; the numbers at the top of the academic rankings would be proportionate, and consequently the differences between groups due to their relative numbers alone, would diminish.

This relatively small sample, while chosen so as to characterise the student and staff body, may not in fact represent the opinions of the majority of the medical school community. Furthermore, medical students are a highly-selected group of learners, so may not represent the community at large. On the other hand, these are successful students who have overcome barriers of race, class, schooling and other limitations on academic progress in order to gain access to higher education. This in turn begs the question: How much *more* may these barriers restrict other *less* gifted learners?

Conclusion

The world literature, this study's GEE comparison of race with other demographic factors, and respondents' opinions, do not sustain 'race' as an independent influence on academic performance. This is not to say, as do the 'post-racialists', that race can now be ignored. Because race stands as a surrogate for so many other factors, it serves as a potent indicator of these potential advantages or handicaps; nonetheless, the areas of attention should be these other factors, not race itself.

Among these other factors, recent literature links class, or socioeconomic status, family, peer and cultural influence, lack of identification with the predominant educational system, and language, with race. The shift, over many decades, from a closed, dismissive racism to a more explicit, nuanced exploration of the root causes of racial differences in academic achievement finds echoes in South African respondents' views in the 21st century.

Analysis of students' marks over their five-year degree showed apparent race-based differences, which disappeared when compared to other influences. This too finds echoes in respondents' views: other than race itself, they discussed educational background, community motivation, differing extracurricular pressures, grasp of terminology (rather than language *per se*), the effects of quota-based selection, family intellectual and material resources, and students' perceptions of agency or disempowerment in the face of apparently adverse attitudes of staff members interacting with them.

This study suggests that, while 'race' as a construct is a hollow shell, it may contain – and often conceal – numerous important determinants of academic wellbeing. It carries implications, both for staff development and for student mentoring, of raising to consciousness perceptions that may significantly affect teaching and learning. As noted above, we have documented that small-group learning's interaction between and within students and staff members lends itself to the constructive resolution of conflict in small groups. The implications for the more distanced interaction of lectures are less obvious, but possibly more radical. If a large-group session is to be more than a unidirectional lecture, the lecturer has to understand that students do not respond uniformly to an invitation to interrupt and to question the authority figure. This would require a major shift in understanding the teaching and learning interaction on both sides. Further research with a view to confirming the validity of Ogbu's theory in the South

African setting, exploring other possible sources of academic variance that might be subsumed under the label of race, and widening the range and level of students studied, is recommended.

This longitudinal observational mixed-methods study amongst a select group of higher education students in a developing country confirms and supplements a number of findings made elsewhere in different settings. It applies an established theory to a novel setting. It acknowledges the past and present ‘black-white score gap’ referred to in the introduction, and affirms that this gap is not ‘an inevitable fact of nature’, but is composed of a complex interplay of factors. It looks forward to a future when medical – and other – students, like those interviewed in a study on successful African-American males,

are somehow debunking longstanding caricatures of [students] as lazy, unmotivated, underprepared for college, intellectually incompetent, and disengaged. Find them. Ask them how they got there. Understand what keeps them enrolled at the institution from year-to-year; why they are so engaged inside and outside the classroom; what strategies they employ to earn good grades and cultivate substantive relationships with professors; and how they manage to transcend environmental, social, cultural, economic, and academic barriers that typically undermine achievement for others like them (Harper 2012: 25).

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References

- Aldous-Mycock, CM 2008. *The Implementation of C2005 in Mathematics and Science Classes in Mpumalanga*. Enschede: University of Twente.
- Alexander, KL, RD Entwisle & SD Bedinger 2007. When Expectations Work: Race and Socioeconomic Differences in School Performance. In Landry, B (ed): *Race, Gender, and Class: Theory and Methods of Analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Apple, MW 2001. Educational and Curricular Restructuring and the Neo-liberal and Neo-conservative Agendas: Interview with Michael Apple. *Currículo sem Fronteiras* 1,1: I - xxvi.
- Ball, AF 2006. *Multicultural Strategies for Educational and Social Change: Carriers of the Truth in the United States and South Africa*. New York & London: Teachers College Press.
- Bloch, G 2009. *The Toxic Mix: What's Wrong with South Africa's Schools and How to Fix it*. Cape Town: Tafelberg.
- Breier, M & A Wildschut 2006. *Doctors in a Divided Society. The Profession and Education of Medical Practitioners in South Africa*. Cape Town: HSRC Press.
- Brown, KD & AL Brown 2012. Useful and Dangerous Discourse: Deconstructing Racialized Knowledge about African-American Students. *Educational Foundations* Winter-Spring: 11 - 26.
- Christie, P, D Butler & M Potterton 2007. *Schools that Work*. Report of Ministerial Committee 13 October 2007. Pretoria: Department of Education
- Dixon-Román, EJ, HT Everson & JJ McArdle 2013. Race, Poverty and SAT Scores: Modeling the Influences of Family Income on Black and White High School Students' SAT Performance. *Teachers College Record* 115,4. Available at: http://works.bepress.com/ezekiel_dixon-roman/9/ (Accessed 16 August 2012.)

- Field, A 2009. *Discovering Statistics Using SPSS. Third Edition*. London: SAGE.
- Gibson, MA 1991. Minorities and Schooling: Some Implications. In Gibson, MA & JU Ogbu (eds): *Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities*. New York & London: Garland.
- Gillborn, D & H Mizra 2000. Educational Inequality: Mapping Race, Class and Gender. A Synthesis of Research Evidence. Available at: http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED457311&ERICExtSearch_SearchType_0=no&accno=ED457311. (Accessed 1 September 2010.)
- Harber, KD, JL Gorman, FP Gengaro, S Butisingh, W Tsang & R Ouellette 2012. Students' Race and Teachers' Social Support Affect the Positive Feedback Bias in Public Schools. *Journal of Educational Psychology* April.
- Hardin, JW & JM Hilbe 2008. Generalized Estimating Equations. *Wiley online library*. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/9780471462422.eoct485/full>. doi:10.1002/9780471462422.eoct485 (Accessed 1 December 2010.)
- Harper, SR 2012. *Black Male Student Success in Higher Education: A Report from the National Black Male College Achievement Study*. Philadelphia: University of Pennsylvania.
- Henig, JR, RC Hula, M Orr & DS Pedescleaux 1999. *The Colour of School Reform: Race, Politics, and the Challenge of Urban Education*. Princeton: Princeton University Press.
- Heugh, K, G Diedericks, C Prinsloo, D Herbst & L Winnaar 2007. *Assessment of the Language and Mathematics Skills of Grade 8 Learners in the Western Cape in 2006*. Pretoria: Human Sciences Research Council.
- Howie, S, E Venter & S van Staden 2006. The Effect of Multilingual Policies on Performance and Progression in Reading Literacy in South African primary schools. Available at: http://www.iea.nl/fileadmin/user_upload/IRC2006/IEA_Program/PIRLS/Howie_et_all_2_final.pdf (Accessed 17 September 2010.)
- Jencks, C & M Phillips 1998. *The Black - White Test Score Gap*. Washington: The Brookings Institute.
- Lam, D, C Ardington, N Branson, K Goostrey & M Leibrandt 2010. *Credit*

- Constraints and the Racial Gap in Post-secondary Education in South Africa*. Paper presented at the Population Association of America 2010 meeting. Available at: <http://sds.ukzn.ac.za/files/PostSecondaryEducation-SouthAfrica-PAA2010.pdf>.
- Landry, B 2007. The Theory of Intersectional Analysis. In Landry, B (ed): *Race, Gender, and Class: Theory and Methods of Analysis*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Lapping, B 1986. *Apartheid: A History*. London: Grafton.
- McCain, JA 2010. 'You've got to want to do!' *An Examination of the Construction of Academic Identity among High-achieving African American High School Adolescents*. University of North Carolina, Greensboro, NC.
- Mwamwenda, TS 1995. *Educational Psychology – An African Perspective*. Durban: Butterworth.
- Ogbu, JU 1990. Minority Education in Comparative Perspective. *Journal of Negro Education* 59,1: 45 - 57.
- Ogbu, JU 1991. Immigrant and Involuntary Minorities in Comparative Perspective. In Gibson, MA & JU Ogbu (eds): *Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities*. New York & London: Garland.
- Ogbu, JU 1992. Adaptation to Minority Status and Impact on School Success. *Theory into Practice* 31,4: 287 - 295.
- Ogbu, JU 2003. *Black American Students in an Affluent Suburb: A Study of Academic Disengagement*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Osborne, JW 1997. Race and Academic Disidentification. *Journal of Educational Psychology* 89,4: 728 - 735.
- Parker, R 2012. *Relationships among Belongingness, Behavioral and Environmental Factors, and Academic Achievement*. Lubbock, Tx: Texas Tech University.
- Simkins, C & A Paterson 2005. *Learner Performance in South Africa Social and Economic Determinants of Success in Language and Mathematics*. Pretoria: Human Sciences Research Council.
- Sommerville, TE 2012. *People and Pedagogy: Problem-based Learning in the MBChB Curriculum at UKZN Medical School*. Unpublished manuscript, Durban: University of KwaZulu-Natal.
- Sontam, V & G Gabriel 2012. Student Engagement at a Large Suburban Community College: Gender and Race Differences. *Community College*

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Journal of Research and Practice 36,10: 808 - 820.

Warren, CA 2012. The Effect of Post-racial Theory on Education. *Journal for Critical Education Policy Studies* 10,1: 197 - 216.

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