ARE ASIANS OVER-REPRESENTED IN TRAINING IN THE HEALTH PROFESSIONS?

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Concern has been expressed about alleged Asian domination of student entry into elite health courses. This article analyses the latest university enrolment statistics. It shows that such concerns are only partially correct for medicine but justified in the case of dentistry and optometry.

Recent forthright comments by prominent commentators have given the impression that entry into certain university courses which provide access to the prestigious health professions in Australia is being dominated by Asians. Michael Duffy in his *Sydney Morning Herald* (SMH) column has wondered aloud about the scale of Asian success. He thinks it is probably significant. This conclusion is based in part on publicity about the alleged success of students of Asian origin in winning places at selective high schools in Sydney. Students from these schools are renowned for their achievement in Year 12. Their success (in terms of ENTERs, the Equivalent National Tertiary Education Rank) places them in a good position to compete for university places for education in the health professions such as medicine, dentistry and optometry, since in each case only the very top students have any chance of obtaining a place. Duffy cites an 'informed academic' who says that about 50 per cent of entry level dentistry students and a quarter of medical students were from Asian backgrounds'.[1]

In this context, Andrew Fraser (recently in the news following his employment difficulties with Macquarie University for comments critical of aspects of Australia's migration program) claims that 'East and South Asians [are] already dominating competition for university places and professional careers'. He believes that the result in time will be that the 'cognitive elite would probably grow into a heavily Asian managerial professional ruling class prepared to favour the interests of co-ethnics at the expense of white Australians'.[2]

A recent SMH analysis of the social make up of students winning coveted places in Sydney's selective high schools provides further evidence of Asian achievement. The SMH gained access (via a Freedom of Information request) to details of the extent to which students from Non-English-Speaking-Backgrounds (NESB) have won places in some 17 of these schools. With few exceptions, at least two-thirds of the students concerned come from non-English speaking backgrounds. The report concludes that 'In the 21st century, students of Asian heritage are the dominant cultural group in the 19 fully selective schools that enrol the top 5 per cent of high academic achievers'.[3]

The educational progress of first and second generation young people has long been regarded as a crucial indicator of migrant integration in Australia. This is one reason why there have been many studies of this progress, including by the present authors. Another reason for such studies is that successive Australian governments have required universities to report on their achievement in recruiting students with allegedly disadvantaged backgrounds. The six 'equity' categories enunciated in higher education policy

include women (particularly in non-traditional fields and research), NESB students, students with disabilities, indigenous students, rural and isolated students and students from socio-economically disadvantaged areas. As far as the NESB group is concerned, studies based on this reporting have delivered good news. Relative to young people born in Australia with Australia-born parents the children of NESB migrants (particularly those from Asian backgrounds) have done very well in completing their later secondary school years and obtaining places at university.[4]

The evidence reported by the SMH confirming NESB dominance in gaining entry into Sydney's selective high schools seem to confirm the good news story. But, not everyone sees it in these terms which is why the matter is controversial. Some observers, including Australia-born parents who have invested heavily in their children's education, are inclined to think that migrants are having 'too much' success. The problem from their perspective is that in the élite health professions there are many aspirants for each of the relatively few subsidised university places. Indeed competition for these places has grown because there has been no increase in the number of subsidised places for domestic students in medicine over the past two decades. Migrant success is all very well in the abstract, but if this success serves to exclude young people of non-migrant background, it might be seen in a different light.

This article examines whether there is any truth to the perception that students from particular ethnic backgrounds (particularly Asian) are dominating three of the most competitive entry health fields — medicine, dentistry and optometry. The analysis uses unpublished statistics from the Department of Education, Science and Training (DEST) and the Australian Bureau of Statistics (ABS).

BIRTHPLACE OF STUDENTS IN THE HEALTH PROFESSIONS

The following tables have been derived from customised DEST aggregated data sets. Among other things, they detail the birthplace and language spoken at home of students enrolled in university courses in medicine, dental science and optometry. The data focus on the year 2004.

The tables differentiate between domestic students and overseas fee-paying students. In some instances the domestic students include people paying full fees, as well as those in government subsidised places. But as far as medicine is concerned, there were no full-fee local students among domestic enrolees in 2004, because such enrolments were not permitted. This policy changed for 2005. Universities offering optometry and dentistry courses were permitted to offer full fee-paying places to domestic students in 2004.

The social make-up of the medical, dental and optometric workforces in future will primarily refect the characteristics of current domestic student enrolees, but immigration will also have an impact. Changes in 2004 to Australia's immigration policy will permit overseas students studying medicine (as is already the case for overseas students in several other professional fields including dentistry and optometry) to apply for permanent residence on completion of these courses. Thus we also need to pay attention to the make-up of the overseas student population. In the case of medicine there were 1,735 overseas students enrolled at Australian universities in 2004, compared with 7,588 domestic students. Many of these overseas medical students

are likely to take up the immigration option now that it is open to them.[5]

In the case of domestic students, Table 1 indicates that 30.2 per cent of enrolled medical students in 2004 were born overseas. For dentistry the parallel figure for domestic students was 51.6 per cent and for optometry students it was 43.1 per cent.

These figures give only a partial indicator of the ethnic make up of these fields, since they do not include Australia-born children if immigrants. In the case of Asian representation, the second generation impact is not likely to be significant. Most of Australia's Asia-born population comes from china or India and arrived during the last 20 years. There are relatively few Australia-born people with China- or India-born parents who arrived in Australia before the mid-1980s. To the extent that there is any second generation Asian presence, the only way it can be assessed via the DEST statistics is by information on the language spoken at home. Table 1 provides data on the numbers of Australia-born domestic students in 2004 who spoke a language other than English at home. In the case of medicine, 341 of the Australia-born students spoke a language other than English at home, as did 79 of the dentistry students and 72 of students enrolled in optometry. These figures represent 4.5 per cent, 7.6 per cent and 14.0 per cent respectively of the domestic student numbers in each of the fields. When we combine overseas-born domestic students with those who are Australia-born but speak a language other than English at home, the overall share of places taken by this combine is as follows: 34.7 per cent for medicine, 59.2 per cent for dentistry and 57.1 per cent for optometry. (See Table 1)

These figures do not support the supposition that overseas-born or second-generation students are dominating entry into the medical profession, though they do support such a contention in relation to dentistry and optometry.

Nonetheless, students of migrant background are significantly over represented in all three fields. At the time of the 2001 Census, 84 per cent of all persons living in Australia aged 15-24 who provided details of their birthplace indicated that they were Australia-born and 16 per cent that they were foreign-born. Most university students in these fields in 2004 would have been drawn from this population of 15-24 year olds. When we consider medical students, who are 30.2 per cent overseas-born, we can see that they are overrepresented by a factor of almost two. In the case of dentistry and optometry the over representation is three to fourfold.

Table 1: Domestic students enrolled in Medicine, Dentistry, and Optometry, 2004

Course	Overseas-born	Australia-Born			Overseas and Australia-Born	Overseas-Born and Australia-Born NESB
		English-speaking	Non English-Speaking	Total		
Medicine.	2290	4,957	341	5,298	7,588	2,631
Per cent	30.2	65.3	4.5	69.8	100.0	34.7
Dentistry	537	425	79	504	1,041	616
Per cent	51.6	40.8	7.6	48.4	100.0	59.2
Optometry.	222	221	72	293	515	294
Per cent	43.1	42.9	14.0	56.9	100.0	

Source: DEST Aggregated Data Set, customised, 2004, unpublished

As shown in Table 2, most of the overseas-born domestic students are from Asia. However, it may surprise that the largest single birthplace country among foreign-born medical students is the UK. There are also substantial numbers born in the USA, South Africa and New Zealand. Asia-born students have done particularly well in winning places in dentistry and optometry. The number of Taiwan-born students in dentistry (72, or seven per cent out of a total of 1041 enrolled students) is extraordinary, considering that the Taiwanese presence in the 15-24 year old Australian population is only 0.3 per cent. Thus Asia-born students are heavily over-represented in university course preparing student for the health professions relative to the total population in Australia in the relevant age group. As a rough indication of those with a Chinese background, we have grouped together people born in China, Hong Kong, Malaysia, Taiwan and Singapore. This group made up 9.9 per cent of domestic medical students, 20.8 per cent of dental students and 20.6 per cent of the optometry students. By comparison, in 2001 persons born in these countries amongst Australia's total population aged 15-24 was only 2.9 per cent.

Assuming that Australia's new immigration rules are not changed, it is likely that fee-paying overseas students will augment Australia's medical, dental and optometry workforces over the next few years. As Table 3 indicates, most of these persons will be Asia-born — predominantly from Malaysia in the case of both medicine and dentistry.

CONCLUSION

This analysis confirms a story told many times. Many migrant families place great importance on higher education and are

Table 2: Domestic students enrolled in Medicine, Dentistry, and Optometry, 2004, by country of birth

	Medical		Dentistry		Optometry	
Country of Birth	No.	Per cent	No.	Per cent	No.	Per cent
Australia	5,298	69.8	504	48.4	293	56.9
Malaysia	190	2.5	48	4.6	16	3.1
China	170	2.2	47	4.5	35	6.8
Hong Kong	170	2.2	41	3.9	34	6.6
India	169	2.2	31	3.0	6	1.2
Sri Lanka	163	2.1	29	2.8	3	0.6
Taiwan	146	1.9	72	6.9	19	3.7
New Zealand	119	1.6	12	1.2	6	1.2
United Kingdom	227	3.0	25	2.4	4	0.8
South Africa	100	1.3	4	0.4	6	1.2
Singapore	76	1.0	9	0.9	2	0.4
USA	71	0.9	4	0.4	3	0.6
Sth Korea	63	0.8	42	4.0	11	2.1
Viet Nam	56	0.7	28	2.7	32	6.2
Iran	43	0.6	17	1.6	4	0.8
Canada	34	0.4	7	0.7		0.0
Other countries	460	6.1	120	11.5	36	7.0
Unknown/Unspecified	33	0.4	1	0.1	5	1.0
Total	7,588	100.0	1041	100.0	515	100.0

Source: DEST Aggregated Data Set, customised, 2004, unpublished

prepared to invest heavily in their children's capacity to compete for scarce university places in prestigious fields. The children's success in this competition reflects this parental ambition. But success of this kind usually requires financial resources as well as ambition. Thus it is no surprise that the Asian students who do well often come from professional and managerial families. Thus their achievement is as much a product of social class as it is of distinctive ethnic values.

For decades, Australia has drawn heavily on overseas-trained doctors and other health professionals particularly those trained in the UK. This dependence has been acute in recent years (with many more health professionals drawn from non-western sources than in the past). It is a consequence of the policy pursued by successive Australian governments to maintain domestic training in medicine only at the levels reached in the mid-1980s. Thus the domestic output of new graduates in the health professions has been static at a time of rapidly growing demand for medical services in Australia.

The shortage of medical professionals has been exacerbated by the increase in the female share of health-sector enrolments. In 2004, 55 per cent of students enrolled in medical course were women. For a number of reasons, female medical graduates' labour force participation is lower than their male counterparts. For instance, it has been reported that female GPs work on average of 39.2 hours, per week compared with 55.8 hours for male GPs.[6] In order to accommodate this factor, the

Table 3: Overseas students enrolled in Medicine, Dentistry, and Optometry, 2004, by country of birth

Country of Birth	Medicine		Dentistry		Optometry	
	Number	Per cent	Number	Per cent	Number	Per cent
Malaysia	694	40.0	75	33.5	16	23.9
Singapore	197	11.4	40	17.9	9	13.4
Canada	129	7.4	18	8.0	4	6.0
Indonesia	96	5.5	2	0.9	1	1.5
USA	79	4.6	4	1.8		0.0
Norway	74	4.3		0.0	1	1.5
Hong Kong	53	3.1	9	4.0	12	17.9
Taiwan	50	2.9	11	4.9	1	1.5
Botswana	46	2.7		0.0		0.0
United Kingdom	31	1.8	4	1.8	0	0.0
Mauritius	26	1.5	3	1.3	1	1.5
Sri Lanka	23	1.3	2	0.9		0.0
China	19	1.1	3	1.3	13	19.4
Brunei Darussalam	18	1.0	3	1.3		0.0
Sth Korea	18	1.0	22	9.8	2	3.0
Japan	15	0.9	3	1.3	1	1.5
Thailand	14	0.8	2	0.9	1	1.5
India	14	0.8	4	1.8		0.0
Kenya	14	0.8	3	1.3	1	1.5
Other Countries	113	6.5	16	7.1	3	4.5
Not Known	12	0.7		0.0	1	1.5
Total	1,735	100.0	224	100.0	67	100.0

Source: DEST Aggregated Data Set, customised, 2004, unpublished

number of subsidised places for domestic students ought to have been increased. It was only in 2004 that the policy of stasis changed and a decision was made to increase in the numbers of domestic student places in medicine rapidly. The effect of this reliance on overseas sources is manifested in Census figures which show that the Australia-born proportion of employed general practitioners and specialists has declined from 63.2 per cent in 1991 to 59.8 per cent in 1996 and 56.3 per cent in 2001.

In the case of medicine, the fact that 69 per cent of domestic medical students in 2004 were Australia-born implies that the decline in the share of all doctors practising in Australia who are Australia-born (to 56.3 per cent in 2001) will be arrested. It was established above that only a small share of these Australia-born domestic medical students were of Asian origin. Thus we conclude that there is no imminent prospect that Australia's medical workforce will be dominated by an Asian 'cognitive elite'.

This conclusion needs to be tempered by the likelihood that many of the overseas students currently enrolled in medicine (who are predominantly from Asia) will stay on in Australia in response to the migration opportunities recently opened for them. Also, there is little doubt that Australia will continue to draw on overseas-trained doctors while the current medical shortage persists. On the other hand, the policy decision to increase domestic medical student enrolments implies that when these students graduate, they will tilt the balance back to the Australia-born. This argument assumes that the current birthplace pattern of domestic student enrolments will be maintained.

The situation is different in the case of dentistry and optometry. The birthplace make-up of these professions is being transformed because of the success of persons born in Asia, or the children of Asia-born parents, in competing for scarce university places in these two fields. Questions do need to be asked about what this transformation means for the provision of services in these professions therefore example, is any impact on the location of service providers?

As regards inter-ethnic competition for places within these professions, it is clear that Australia-born students are the losers. Is this is a signal for government intervention? Do we need another equity category such as Anglo-Celtic males along with a target participation level like that for students classified as NESBs? Definitely not! We have been highly critical of the existing equity scheme and would not be a party to its extension.

Australia has a system of competitive entry for university places which, for the most part is based on merit. If Asia-born or Asia-origin students win out in this competition they deserve their success. This success should not be challenged because the mainstream community puts less emphasis on academic achievement.

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