

GROWTH IN REGISTER NUMBERS AND STRENGTH

ANNUAL CHANGES in the numbers of registered optometrists reported by the General Optical Council suggest that the profession is growing, but one needs to take into account the relative contributions of men and women OOs and their ages to be able to quantify the change and establish whether one really has growth and not contraction. It takes four years or so for a student to become a registered optometrist so it ought to be possible to anticipate Register changes up to four years hence from previous training institution intakes. If we take things a step further and look at the plans of optometry departments we ought to be able to anticipate the consequences of present policies five or more years hence.

Previous manpower studies

All optometric manpower studies appear to have underestimated future Register recruitment figures. Alpine (1970) assumed intakes of 125 or 150 newly registered OOs each year, but after 1970 the annual figure was never as low as 125 and from 1974 onwards always exceeded 150. The response of the training institutions was not surprising in that Alpine had forecast a fall in the effective supply of optometrists at the rate of between one and one and a half per cent per annum.

Towards the end of the decade, the central intake assumptions made by manpower studies were 210 (Bennett, 1977 and 1978), 208 (Alpine and Jack, 1978), and 215 (Alpine and Jack, 1979). But by 1979 these figures had already been exceeded and in 1980 the intake topped 250 for the first time (Table 1) — a higher figure even than Alpine and Jack's 'optimistic' assumptions of 225 and 230. The main reason for the underestimations appears to lie in these

studies' assumptions about failure rates. Bennett (1978) assumed a 19 per cent failure rate, Alpine and Jack (1978) assumed 20 per cent, and Alpine and Jack (1979) assumed 25 per cent male and 15 per cent female. Table 1 suggests that after 1977 the loss rate between entry to the degree courses and registration with the GOG would never again reach 20 per cent and remained in the region of 8 to 14 per cent.

French and Loran (1983a, 1983b) appear to have fared only a little better in their assumptions. After consulting all six departments in January 1983 about the October 1983 intakes they assumed there would be 245 home entrants from 1983 onwards (a reduction of 9 per cent from the earlier peak of 269) to result in registrations of 225 four years later (1987 plus). This was a time of considerable uncertainty regarding Government payments to

universities for home students and there was even uncertainty regarding the legal position on overseas students' fees. In fact 267 home students were admitted to the degree courses in that October—22 more than anticipated—largely due to an increase in the target that year at Aston from 40 to 58. French and Loran (1983b) assumed new home registrations of 240,240,240 and 230 between 1983 and 1986. Although new registrations from overseas students are only of a temporary nature, it would have been more appropriate to have considered *all* new degree registrations (the GOC's Table N minus section 3.3 of Table M) rather than just the home ones. The important fact is that most overseas graduates enter the Register and are therefore part of the model even if they then leave fairly quickly. Thus, the 1983 to 1985 assumptions were on average 14 per

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Table 1: Wastage amongst admissions to courses

admissions		graduations			registrations		
year ¹	total	year	total	loss %	year	total	loss %
1986	285	1989	...	...	1990	...	...
1985	296	1988	...	...	1989	...	...
1984	296	1987	281	5.1	1988	...	...
1983	288	1986	258	10.4	1987	...	...
1982	272	1985	248	8.8	1986	243	10.7
1981	283	1984	255	9.9	1985	259	8.5
1980	287	1983	262	8.7	1984	254	11.5
1979	287	1982	255	11.2	1983	252	12.2
1978	283	1981	246	13.1	1982	251	11.3
1977	273	1980	250	8.4	1981	235	13.9
1976	283	1979	239	15.5	1980	257	9.2
1975	265	1978	233	12.1	1979	228	14.0
1974	268	1977	241	10.1	1978	218	18.7
1973	279	1976	240	14.0	1977	221	20.8
1972	229	1975	198	13.5	1976	204	10.9
1971	217	1974	186	14.3	1975	175	19.4
1970	177	1973	153	13.6	1974	150	15.3
1969	172	1972	148	14.0	1973	134	22.2

Registrations are taken from Table N minus section 3.3 of Table M from the GOC's annual statistics.

The average failure rates for veterinary schools over 5 years up to 1985 and nine per cent for men and seven per cent for women (Ministry of Agriculture, 1985). Wastage between entering medical school and provisional registration with the GMC amongst those born in the United Kingdom and Irish Republic is eight per cent for men and six per cent for women, while it is 22 per cent and 20 per cent for those born elsewhere (DHSS, 1985). Comparing intakes to dental schools over a five year span between 1975 and 1979 with graduations five years later between 1980 and 1984 gives a 10 per cent drop out rate. Prior to this undergraduate dropout rates were assumed to be 14 per cent (BDA, 1985).

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annum too low.

Despite these shortcomings, French and Loran (1983b) did also consider an upper Register intake from 1987 onwards of 250. This was close to the two central assumptions of French (1985)—243 and 266 depending upon the choice of loss rates. But even this now appears a shade too low with equivalent admissions to degree courses now regularly exceeding 290.

The algorithm for calculating changes in the numbers of optometrists is given in Figure 1 and this summarises the information required with respect to (i) the Register, (ii) likely annual wastage rates and (iii) likely annual recruitment.

The Register

One needs an estimate of the age and sex of each person registered with the GOG for the base year. The GOC's Table As only provide this information for five-year bands. Despite this it is still possible to estimate the totals for single years, although parallel computer simulations suggest that the refinement of these figures is not important—the resulting difference in predicting overall register totals being small.

Register losses and gains

Leaving aside the question of recruitment, the biggest problems in predicting the future are the losses and gains which come from miscellaneous sources. The 1986 Optometric Manpower and the Need for Vision Care questionnaire (see also French and French-Teeling, 1987; French, 1987a; French, 1987c; French, 1987e) asked people if they had ever left the Register and from this it was clear that the main reasons for temporary departures were immigration/emigration, retirement, family circumstances, illness and forgetfulness. Not everyone makes an active decision to retire and some will die while working. Others will have entered this country after qualifying abroad.

One approach would be to attempt to separate out each of these component sources of gains and losses and then aggregate them, but this would be impractical. Instead, the annual GOG statistics enable us to make reliable assessments of the aggregate changes which in the end amount to a nett withdrawal for virtually all age groups.

These changes have already been examined and the net proportion of people leaving the United Kingdom Register in any one year for any reason

at all have been calculated by French (1987f). The future intentions gleaned from the questionnaire indicated earlier retirement ages than these for both sexes with higher annual withdrawal rates in the age ranges 60 to 75 but marginally fuller working lives. Unfortunately, whether these reflect realistic assessments of the future and a future trend towards earlier retirement or the inability of people to accurately anticipate their future behaviour cannot be determined. Clearly one must continue to monitor changes in these loss rates.

Recruitment to Register

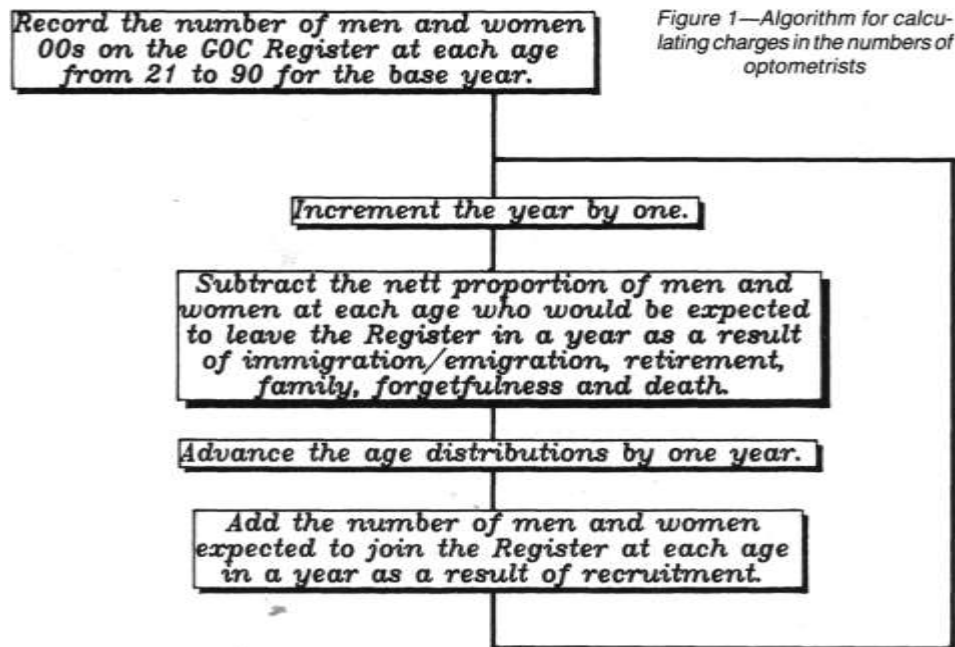
To provide information on recruitment one needs the age distribution of the new registrations from the training institutions for men and women as well as their total numbers.

This information is not regularly collated. The age distribution will vary from year to year. The University Central Council for Admissions' admission figures might be used as a basis with four or five years being added to ages to represent the distribution at registration. Unfortunately, UCCA statistics do not include the ages of the Glasgow recruits and, as only half pass the British College of Optometrists professional qualifying examination first time, there will also be an increase in the spread of the distribution. The distribution is assumed to be close to that used by French and Loran (1983a).

The number of future new registrations is best assessed by (i) checking upon the proportions of home students, (ii) looking at the current recruitment policy of the optometry departments for the total, (iii) examining recent years for the trend in the male/female ratio, and (iv) examining the loss rates between admission and registration.

In the past, there was a tendency for departments to determine what they saw as their capacity in terms of their resources—space, equipment and staff—and seek to fill the department with students whom they felt met suitable academic standards.

More recently, changes in government policies have brought severe economic pressures on universities and colleges. As a result, some institutions



have pressed departments to make changes. These changes have varied significantly from time to time and from department to department. Sometimes increases have been ordered while at other times decreases have been sought. As a result of the introduction of higher fees for overseas students, some departments have been obliged to discriminate between home and overseas students with institutions setting them separate targets. The end result has been fluctuations in overseas numbers in some optometry departments, although overall there appears to have been little change.

UCCA statistics recording admissions suggest that between 1968 and 1982 (see Table 2) the proportion of overseas students varied between five and nine per cent with no obvious trend but these statistics may exaggerate their proportion as accepted overseas students do not always materialise at admission time. According to optometry departments' own records over the last four years the proportion of overseas students admitted has been eight, seven, seven and four per cent (see Tables 2 and 3).

On occasions, institutions have sought ways of improving their A-level profile by increasing recruitment to departments like optometry. In the early years of ophthalmic optics as a degree course (from 1964) the A-level scores requested were quite low with some students being admitted with Ds and Es. They rose over the years (as in dentistry and medicine) with the increase in popularity of optometry. Peak popularity was for the October 1979 entry with UCCA recording 1,074 applications to English and Welsh departments alone. The A-levels requested reached a maximum of three B's in small departments. Since then there has been a decline in demand with occasional reverses (French, 1982). Currently applications are two-thirds of the 1979 level with departments looking mainly for some combination of Bs and Cs.

For October 1987 the six departments anticipate admitting a total of 293 students. This compares with recent total admissions of 288, 296, 296 and 285 (see Table 3). The most recent figures (1986) show a new low in the

Table 2: Proportion of overseas students amongst recruits to degree courses by expected year of registration

Year of registration overseas		%	
1991	11	1981	9
1990	4	1980	8
1989	7	1979	8
1988	7	1978	6
1987	8	1977	6
1986	8	1976	5
1985	6	1975	6
1984	6	1974	5
1983	7	1973	7
1982	5	1972	9

It is important to remember that the definition of an overseas student has varied over the years and also that some students will be classified as overseas although at the time of admission it is already clear that they have a right to residency in the United Kingdom and will become reclassified as home students by the time of the second year of their degree course. Other overseas students will become British as a result of marriage.

proportion of overseas students of just four per cent, but the expectation for October 1987 is 11 per cent. It would seem premature to see in the four per cent a new trend as this proportion has dipped to five per cent on several occasions over the last 18 years (see Table 2). When adjusted for the four year course at Glasgow the potential registrations become 298 in 1991.

Over the last three years the overall intake has been 60 per cent female. The losses between admission and graduation are given in Table 1 and average out at 8.6 per cent over the last five years for Home and Overseas students combined. If we assume the loss rate is around 20 per cent for overseas students (the figure given for overseas medical students—see DHSS, 1985) then this would suggest a home student loss rate of 7.8 per cent. These figures are similar to those from other health care degree courses—nine per cent for

men and seven per cent for women veterinary students (Ministry of Agriculture, 1985); eight per cent for men and six per cent for women medical registrations (DHSS, 1985); and 10 per cent for dental students (BDA, 1985). Little difference is apparent between the optometry admission-graduation and admission-registration figures (see Table 1) and in view of the downward trend in the last few years I will be using nine per cent for the admission-registration loss.

It is not obvious but almost all overseas students, when they pass their professional qualifying examinations, will first appear on the GOG United Kingdom Register. This is because they are practising in this country. It is very important to note that presence on the UK Register does not imply British nationality or residency and these newly qualified optometrists will in most cases shortly return home—either entering the Overseas Register or leaving the Register completely—although a few will have acquired British Nationality and remain. Thus, part of the Register losses might be more precisely labelled as 'foreigners with short-term permission to stay in this country returning home' than as 'emigration'. The computer model takes this into account and this is clearly one factor in register loss rates of around half a per cent per annum for those under 45 years of age, but it is not obvious and it is easy to assume incorrectly that the Home Register is only of British Nationals working in the UK.

Thus, what the model needs to project future years is the equivalent of the GOC's Table N minus section 3.3 of Table M—the annual total of home and overseas optometrists working in this country entering the Register after obtaining their optometry degrees. These figures are given in Table 4. We can use the nine per cent loss range

Table 3: Nationality and sex of recent optometry degree admissions by expected year of Registration

year of registration	home			overseas			all		
	men	women	both	men	women	both	men	women	both
1991			276			21			297
1990	121	152	273	3	9	12	124	161	285
1989	103	169	272	6	18	24	109	187	296
1988	112	162	274	7	15	22	119	177	296
1987	128	136	264	13	11	24	141	147	288

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Table 4: United Kingdom Register recruits from training institutions by sex and year of Registration

year of registration	men	women	total
1991	...	...	270
1990	113	146	259
1989	99	170	269
1988	108	161	269
1987	127	135	262
1986	97	145	242
1985	141	118	259
1984	132	122	254
1983	143	109	252
1982	135	116	251
1981	130	105	235
1980	161	96	257
1979	141	87	228
1978	117	101	218
1977	117	104	221
1976	97	107	204
1975	100	75	175
1974	94	56	150
1973	88	46	134
1972	89	46	135
1971	111	36	147
1970	87	39	126
1969	96	45	141
1968	112	36	148
1967	95	20	115
1966	54	24	78

Recruits are from UK degree course and have been obtained by subtracting section 3.3 of Table M from Table N (see GOC's annual statistics). It has been assumed that 70 per cent of section 3.3 of Table M is male. This is an arbitrary assumption and may well be inaccurate but it is unlikely to introduce a large error due to the small numbers involved in Table M. Optometrists who were overseas undergraduates and who, having obtained their degrees and passed their PQE, will shortly be returning abroad are included in these figures as their first destination is the UK Register.

Figures for 1987 to 1990 are guesses obtained by subtracting nine per cent from the numbers entering optometry degree courses four years earlier in England and Wales and five years earlier in Scotland (see Table 1). Figures for 1991 are guesses similarly derived from department mid-summer 1987 estimates.

between admission and registration without the need to subtract overseas students to anticipate future registrations. It is fortunate for our purposes that the number of overseas candidates have been relatively stable over the years (see Table 2). If their numbers do change substantially this might be expected to lead to a student loss rate closer to eight per cent and lower annual register loss rates for the under 45s.

Nine per cent of 298 gives us a predicted eventual registration figure in 1991 of 271. With the exception of UMIST no department has any new plans to change its present intakes. The UMIST department will be moving into a new building in 1988 and at present plans to increase its first year numbers by two or three to 42, but this small change is likely to be nullified by Glasgow continuing to take a few less than its 1986 intake. Thus, short-term plans of departments suggest an annual admission of no more than 295 home and overseas students resulting in registrations in 1992 and following years of 268 assuming nine per cent losses. Estimated registrations for 1987 to 1991 are given in Table 4 along with the other figures used by the model.

Thus, the present study takes as its central assumption 265 new registrations each year from four years' time (1991 onwards). It assumes that new registrations in 1987 to 1990 will be 262, 269, 269 and 259. From available information these appear to be the consequences of a nine per cent failure rate (Table 1).

The computer model used for the GOG Register is written in Turbo Pascal for an IBM PC compatible and is a development of that first used by French and Loran (1983a, 1983b), originally written for a Sinclair Spectrum. It has been demonstrated that given appropriate information it will accurately predict Register numbers over a 20 year period (French, 1987f).

Future numbers

Future predictions are usually not met but this is no reason not to make them. Many of today's recruits may not consider retirement until 2030 and based upon today's work patterns it could be much later for others.

In attempting to predict the future one has the choice of looking at the last 20 years or a shorter (say five year)

period of time for Register withdrawal patterns. The former has the advantage of providing more dependable statistics in that they will be based upon larger samples of behaviour with the disadvantage that it fails to take into account changes that have occurred in working practices—particularly amongst women (Martin and Roberts, 1980; Seward and McEwen, 1987). One expects there will be further changes, probably in the direction indicated by the present plans of optometrists, but these cannot be predicted with confidence so it may be best to rely upon past experience. In this article I will base my calculations on withdrawal rates for both (i) the last 20 years and (ii) the last five years. A comparison of these two gives some indication of the difference such a factor can make.

The only other major sources of uncertainty are the recruitments from the training institutions and the proportion of these which are women. In round terms the figures presently suggest a total of close to 265 new registrations per annum of whom 60 per cent are women. It seems sensible to follow previous practice (French and Loran, 1983b) and examine the consequences of several levels of recruitment and several proportions of women—250, 265 and 280, and 55, 60 and 65 per cent for Register changes in 1991 and following years.

These various assumptions lead to $2 \times 3 \times 3 = 18$ predictions of Register numbers and strengths and these are summarised in Table 5. The FTE measures used are those given by French (1987d).

If we average the changes over five year periods we obtain the annual percentage changes in these numbers and strengths and these are given in Table 6.

All Register strength measures show positive trends with annual increases in the Full Time Equivalent numbers of the order of one per cent of the period 1980 to 1985 and one and a half per cent after that (Table 6). These changes are against a current background of an annual decrease in the total number of men optometrists of one per cent and an increase in number of women of seven per cent.

The Register is projected to increase

Table 5: Prediction of Register strength and numbers from 1986 base

wastage:		1966-1986									1981-1986								
recruits:		250			265			280			250			265			280		
female:		55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%
year																			
1995																			
men		4352	4290	4228	4385	4320	4254	4419	4349	4280	4357	4295	4233	4391	4325	4259	4425	4355	4285
women		2898	2960	3022	2939	3004	3070	2980	3049	3118	2979	3041	3103	3020	3085	3151	3061	3130	3200
FTE		5703	5695	5688	5767	5759	5751	5831	5822	5814	5769	5761	5754	5833	5825	5817	5897	5889	5881
2000																			
men		4377	4254	4131	4443	4313	4183	4510	4372	4235	4399	4275	4151	4466	4334	4203	4532	4394	4255
women		3430	3551	3672	3510	3638	3767	3590	3725	3861	3568	3691	3814	3649	3780	3911	3731	3869	4007
FTE		6120	6093	6067	6242	6214	6186	6365	6335	6305	6238	6212	6185	6362	6334	6306	6485	6456	6426
2005																			
men		4462	4280	4097	4560	4367	4174	4659	4455	4251	4496	4311	4126	4596	4400	4204	4695	4488	4281
women		3925	4104	4283	4043	4233	4422	4161	4361	4561	4127	4310	4494	4248	4442	4637	4369	4575	4780
FTE		6559	6509	6459	6735	6681	6628	6910	6854	6797	6730	6680	6631	6908	6856	6803	7087	7032	6976
2010																			
men		4564	4323	4083	4694	4439	4184	4824	4554	4285	4609	4364	4119	4741	4481	4222	4873	4599	4325
women		4368	4602	4836	4523	4771	5019	4677	4939	5201	4634	4877	5120	4795	5052	5310	4955	5227	5499
FTE		6931	6858	6786	7159	7082	7005	7387	7306	7224	7154	7083	7011	7388	7312	7237	7622	7542	7462
2015																			
men		4647	4350	4053	4807	4492	4177	4967	4635	4302	4701	4398	4095	4865	4544	4222	5029	4689	4350
women		4738	5026	5313	4928	5233	5538	5118	5440	5762	5063	5365	5667	5263	5582	5902	5462	5799	6137
FTE		7205	7115	7024	7485	7389	7293	7765	7664	7563	7473	7386	7299	7762	7670	7577	8052	7954	7856
2020																			
men		4691	4340	3988	4881	4508	4136	5071	4677	4284	4752	4393	4035	4945	4565	4186	5139	4738	4336
women		5017	5356	5696	5241	5601	5961	5465	5845	6225	5393	5753	6113	5630	6012	6393	5868	6271	6674
FTE		7350	7245	7140	7682	7570	7459	8013	7895	7777	7649	7550	7452	7992	7888	7784	8336	8226	8115
2025																			
men		4696	4294	3892	4913	4487	4061	5130	4680	4229	4760	4349	3939	4981	4546	4111	5203	4743	4283
women		5197	5585	5973	5453	5865	6276	5709	6144	6579	5616	6031	6445	5890	6329	6768	6163	6627	7091
FTE		7397	7278	7159	7773	7647	7520	8149	8015	7882	7716	7605	7495	8107	7990	7873	8499	8375	8251
ultimate																			
men		4618	4106	3595	4894	4352	3810	5170	4597	4024	4689	4170	3650	4969	4419	3868	5250	4668	4086
women		5342	5827	6311	5662	6176	6689	5982	6525	7067	5832	6360	6888	6180	6740	7300	6529	7120	7712
FTE		7361	7218	7076	7802	7651	7500	8244	8084	7925	7694	7567	7440	8156	8021	7887	8618	8475	8333

'Wastage' indicates whether the probability of leaving the Register for any optometrist as a function of their age and sex is based upon the 1966-86 or the 1981-86 periods of data (see French, 1987f). 'Recruits' indicate the annual intake (Table N minus section 3.3 of M) assumed for 1991 onwards—250, 265 or 280. Overseas admissions to undergraduate courses are assumed to be seven per cent. 'Female' indicates whether the assumed proportion of women amongst the recruits is 55, 60 or 65 per cent. 'Year' gives year of predictions. These are based upon the December 31, 1986 Register. 'Ultimate' gives the ultimate or steady state figures for the Register.

The strengths of the profession (FTE) are given in terms of Full-Time-Equivalent optometrists (French, 1987c, 1987d). 'Men' and 'women' indicate total numbers on Register. The men, women and FTE figures for 1980 and 1985 based upon the actual Register data are 4,887, 1,150 and 4,723, and 4,660, 1,671 and 4,960 respectively. The 1990 figures utilising known admissions of men and women and assuming nine per cent losses are 4,422, 2,338 and 5,337. This table is abridged from the report to GOC.

to an ultimate size of a little over 11,000 with a strength of close to 8,000 FTE optometrists. Table 5 makes clear that the choice of withdrawal rates can easily make a five per cent difference in the profession's ultimate strength; the use of the non-preferred 1966-1986 withdrawals leading to an ultimate strength of 7,650 FTE OOs. Variations in the sex ratio amongst recruits also has a significant effect. The main projection is for 60 per cent female recruitment, but if the figure were 55 per cent then the ultimate strength would be one and half per cent higher. Increasing recruitment by 15 leads to a six per cent increase in the ultimate strength.

Conclusion

The likely consequences of new registration rates of 260, 265 and 280 per annum of whom 55, 60 and 65 per cent are women in terms of changes in the profession's numbers and strength have been detailed. As with any study, all of the assumptions could be criticised. It is for others to make up their minds as to whether they are reasonable and whether recruitment should be increased, decreased or remain the same in the interests of the nation's vision care and the profession's members. A crucial element in this assessment

must be the question of need (French, 1987b) and its likely translation into demand, and attention must be focused on this. Here we have predicted Register strength. If we can also predict sight test demand then we can predict changes in sight test workloads. Perhaps then a reasonable assessment can be made of the consequences of the present recruitment plans of the training institutions.

Postscript

Since the GOC report and this article were written, the candidates have received their examination results, the academic year has begun and the training institutions now

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Table 6: Annual percentage changes in Register strength and numbers from 1986 base

wastage:		1966-1986									1981-1986								
recruits:		250			265			280			250			265			280		
female:		55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%	55%	60%	65%
years																			
1985-1990																			
FTE		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
men		-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
women		6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
all		1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
1990-1995																			
FTE		1.4	1.3	1.3	1.6	1.5	1.5	1.8	1.8	1.7	1.5	1.5	1.4	1.7	1.7	1.6	1.9	1.9	1.9
men		-0.3	-0.6	-0.9	-0.2	-0.5	-0.8	-0.0	-0.3	-0.7	-0.3	-0.6	-0.9	-0.1	-0.4	-0.7	0.0	-0.3	-0.6
women		4.4	4.8	5.3	4.7	5.1	5.6	5.0	5.5	5.9	4.7	5.1	5.5	5.0	5.4	5.9	5.3	5.7	6.2
all		1.4	1.4	1.4	1.6	1.6	1.6	1.8	1.8	1.8	1.6	1.6	1.6	1.8	1.8	1.8	2.0	2.0	2.0
1995-2000																			
FTE		1.5	1.4	1.3	1.6	1.5	1.5	1.8	1.7	1.6	1.6	1.5	1.5	1.8	1.7	1.6	1.9	1.9	1.8
men		0.1	-0.2	-0.5	0.3	-0.0	-0.3	0.4	0.1	-0.2	0.2	-0.1	-0.4	0.3	0.0	-0.3	0.5	0.2	-0.1
women		3.4	3.7	4.0	3.6	3.9	4.2	3.8	4.1	4.4	3.7	4.0	4.2	3.9	4.1	4.4	4.0	4.3	4.6
all		1.5	1.5	1.5	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.8	1.8	2.0	2.0	2.0
2000-2005																			
FTE		1.4	1.3	1.3	1.5	1.5	1.4	1.7	1.6	1.5	1.5	1.5	1.4	1.7	1.6	1.5	1.8	1.7	1.7
men		0.4	0.1	-0.2	0.5	0.2	0.0	0.7	0.4	0.1	0.4	0.2	-0.1	0.6	0.3	0.0	0.7	0.4	0.1
women		2.7	2.9	3.1	2.9	3.1	3.3	3.0	3.2	3.4	3.0	3.1	3.3	3.1	3.3	3.5	3.2	3.4	3.6
all		1.4	1.4	1.4	1.6	1.6	1.6	1.7	1.7	1.7	1.6	1.6	1.6	1.7	1.7	1.7	1.9	1.9	1.9
2005-2010																			
FTE		1.1	1.1	1.0	1.2	1.2	1.1	1.3	1.3	1.2	1.2	1.2	1.1	1.4	1.3	1.2	1.5	1.4	1.4
men		0.5	0.2	-0.1	0.6	0.3	0.0	0.7	0.4	0.2	0.5	0.2	-0.0	0.6	0.4	0.1	0.7	0.5	0.2
women		2.2	2.3	2.5	2.3	2.4	2.6	2.4	2.5	2.7	2.3	2.5	2.6	2.5	2.6	2.7	2.5	2.7	2.8
all		1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6

The FTE, men, women and all figures for the period 1980-1985 based upon actual Register data are 1.0, -0.9, 7.8 and 1.0 per cent. The 1985-1990 figures utilise known admissions of men and women and assume nine per cent losses. This table is abridged from the report to the GOC.

continued from page 33 know their intakes for October 1987. Overall, 295 new students were admitted to the first years (seven more than departments expected) and two to later years of UK optometry courses. Six per cent of admissions were overseas and 53 per cent were women. Allowing for the four year course at Glasgow, the effective intake for possible registration in 1991 is 304 (Table 3). If we assume a loss rate of nine per cent this gives us an expected registration total (Table 4) of 277 in that year.

Acknowledgements

This article is based upon part of the Optometric Manpower and the Need for Vision Care report recently submitted to the GOC. This research was supported financially by the General Optical Council, John H Chapman Opticians, the Co-operative Wholesale Society Optical Group, G C Bateman Opticians, Pilkington Ophthalmic Division, Davis-Watson Opticians, Bausch and Lomb, the Central (Local Optical Committee) Fund, and the Federation of Ophthalmic and Dispensing Opticians.

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