

MRCPsych Examinations Cumulative Results 2008-2010

INTRODUCTION

The membership examinations of the Royal College of Psychiatrists are an important component of the assessment procedures of trainee psychiatrists. In addition to completing satisfactorily a series of work place based assessments, trainees are required to demonstrate a pass in the whole examination before being eligible to progress to higher psychiatric training. The examination changed on 2008 in the context of national training changes resulting from the introduction of 'modernising medical careers'. Prior to this, the examination had consisted of two parts (MRCPsych Part I and II). The current MRCPsych examination removed this division and currently consists of

A) 3 written papers.

During the period reported here, the papers could be taken at any time after 12 months experience of psychiatry.

B) A clinical examination consisting of 16 clinical stations.

A pass in all three papers is required to enter the clinical examination assessing skills and competencies (CASC) which is set at a level expected of a trainee who has completed 24/30 months of basic psychiatric training.

The pattern of performance of candidates in the old MRCPsych examination became well known. There was evidence over many years that success in the examination was associated with age, gender, original medical school of training, and ethnicity. In summary those that passed the examination were female, significantly younger, had trained at a UK medical school, and had qualified for a shorter time than those that failed. Gender differences were accounted for by the significantly higher failure rate of candidates who qualified from medical schools outside the UK and Ireland.

The purpose of this report is to summarise the performance of candidates in the current MRCPsych examination since its inception. We therefore report on the performance in the written and clinical examinations of the total cohort of candidates who took the exam between 2008 and the end of 2010.

MRCPsych Paper 1

Table 1 shows the number of candidates who sat and passed Paper 1 by medical school, attempt and gender. In the study period 3814 candidates sat the MRCPsych Paper 1 examination and 1786 of these passed (46.8%). Just over half of those passed on their first attempt (n = 1279, 52.6%). The pass rate for females was 50.9% and 43.9% for males. This difference was statistically significant ($\chi^2= 18.73$, d.f. = 1, $p<.01$).

Overall pass rates of a comparison group were analysed. This group consisted of UK, Indian Borders, Indian Sub-Continent, Republic of Ireland and all other candidates. The overall pass rate varied according to medical school. The pass rate of candidates graduating from UK and Irish medical schools was 64.2% and 52.7% respectively. This compared with 27.1% for graduates from Indian Borders (Afghanistan, Pakistan and Nepal), 42.7% from the Indian Subcontinent (India and Sri Lanka) and 43.1% for the others. This difference was statistically significant ($\chi^2= 201.86$, d.f. = 4, $p<.01$).

Table 1: Paper1 Pass Rates by Country with Attempts and Gender

Medical School	N Cands	Pass attempt 1 n	%	Pass attempt 2 +	%	Male Pass	%	Female Pass	%	Total Pass	%
Australia & New Zealand	9	6	75.0	1	100.0	4	80.0	3	75.0	7	77.8
Central Africa	464	93	35.2	86	43.0	136	40.7	43	33.1	179	38.6
Central America	9	4	66.7	0	0.0	4	44.4	-	-	4	44.4
Europe (Non EU)	156	28	34.1	20	27.0	27	28.7	21	33.9	48	30.8
European Union	271	69	42.9	33	30.0	47	33.1	55	42.6	102	37.6
Middle East	174	31	35.6	28	32.2	44	38.6	15	25.0	59	33.9
North Africa	114	54	65.1	8	25.8	37	56.9	25	51.0	62	54.4
North America	2	1	50.0	-	-	1	100.0	0	0.0	1	50.0
South America	9	2	50.0	1	20.0	2	40.0	1	25.0	3	33.3
South East Asia	140	99	81.8	10	52.6	41	80.4	68	76.4	109	77.9
Southern Africa	31	17	70.8	3	42.9	9	64.3	11	64.7	20	64.5
Subtotal (Other)	1379	404	48.0	190	35.4	352	42.2	242	44.4	594	43.1
Indian Borders	446	62	26.6	59	27.7	80	24.5	41	34.5	121	27.1
Indian Sub-Continent	878	245	47.4	130	36.0	228	43.8	147	41.1	375	42.7
Republic of Ireland	150	61	58.7	18	39.1	35	47.3	44	57.9	79	52.7
United Kingdom	961	507	68.8	110	49.1	275	60.2	342	67.9	617	64.2
Total	3814	1279	52.6	507	36.7	970	43.9	816	50.9	1786	46.8

Overall pass rates varied by number of attempts (Table 2). First attempt candidates performed better than all other candidates. The differences between the pass rates by number of attempts was statistically significant ($\chi^2= 114.69$, d.f. = 6, $p<.01$).

Within the comparison group UK ($\chi^2=28.94$, d.f.=1, $P< .01$), Republic of Ireland ($\chi^2=4.88$, d.f.=1, $P< .05$), Indian subcontinent ($\chi^2=11.25$, d.f.=1, $P< .01$) and the other candidates ($\chi^2=21.23$, d.f.=1, $P< .01$) were significantly more likely to pass on their first attempts.

The overall pass rate varied according to ethnicity for UK PMQ. The pass rate for Unknown candidates was highest (76.9%) followed by Mixed (70%), White (68.5), Other (58.3), Chinese (56.8%), Black (56.3%) and Asian (53.2%). This difference was statistically significant ($\chi^2=19.32$, d.f.=6, $p<.01$).

UK PMQ candidates were categorised into white and non-white¹. The pass rate for white candidates was 68.5% and 55.3% for non-white. This difference was statistically significant ($\chi^2=14.36$, d.f.=1, $p<.01$).

Table 3: Paper 1 Pass Rates by Ethnicity

Ethnicity	All Candidates			UK PMQ		
	Total	Pass	%	Total	Pass	%
Asian	1745	684	39.2	216	115	53.2
Black	530	198	37.4	16	9	56.3
Chinese	159	120	75.5	44	25	56.8
Mixed	55	37	67.3	20	14	70.0
Other	223	94	42.2	24	14	58.3
Unknown	54	32	59.3	13	10	76.9
White	1048	621	59.3	628	430	68.5
Non-White Total	2712	1579	41.8	320	177	55.3
Total	3814	1786	46.8	961	617	64.2

MRCPsych Paper 2

Table 5 shows the number of candidates who sat and passed Paper 2 by medical school, attempt and gender. In the study period 2849 candidates sat Paper 2 examination and 1425 of these passed (50.0%). Just over half of those passed on their first attempt ($n = 1052$, 54.6%). The pass rate for females was 55.6% and 46.2% for males. This difference was statistically significant ($\chi^2=24.12$, d.f.=1, $p<.01$).

Overall pass rates of a comparison group were analysed. This group consisted of UK, Indian Borders, Indian Sub-Continent, Republic of Ireland and all other candidates. The overall pass rate varied according to original medical school of training. The pass rate of candidates graduating from UK and Irish medical schools was 64.4% and 49.5% respectively. This compared with 34.2% for graduates from Indian Borders (Afghanistan, Pakistan and Nepal), 44.2% from the Indian Subcontinent (India and Sri Lanka) and 51.4% for the others. This difference was statistically significant ($\chi^2=102.68$, d.f.=4, $p<.01$).

¹ Ethnic categories are those indicated by candidates on Ethnic Monitoring forms at the time of application.

Table 5: Paper 2 Pass Rates by Country with Attempts and Gender

Medical School	N Cands	Pass attempt 1 n	%	Pass attempt 2 +	%	Male Pass	%	Female Pass	%	Total Pass	%
Australia & New Zealand	7	6	85.7	-	-	4	80.0	2	100.0	6	85.7
Central Africa	365	78	37.0	80	51.9	123	45.4	35	37.2	158	43.3
Central America	4	0	0.0	1	50.0	1	25.0	-	-	1	25.0
Europe (Non EU)	101	24	40.0	11	26.8	21	33.9	14	35.9	35	34.7
European Union	190	54	45.0	21	30.0	35	34.0	40	46.0	75	39.5
Middle East	115	27	39.7	19	40.4	36	43.4	10	31.3	46	40.0
North Africa	70	35	62.5	6	42.9	20	52.6	21	65.6	41	58.6
North America	2	0	0.0	1	100.0	1	50.0	-	-	1	50.0
South America	3	3	100.0	-	-	2	100.0	1	100.0	3	100.0
South East Asia	130	93	82.3	6	35.3	37	77.1	62	75.6	99	76.2
Southern Africa	24	12	63.2	4	80.0	7	53.8	9	81.8	16	66.7
Subtotal (Other)	1011	332	50.3	149	42.5	287	45.5	194	51.1	481	44.2
Indian Borders	278	51	31.9	44	37.3	68	33.7	27	35.5	95	34.2
Indian Sub-Continent	692	195	45.6	111	42.0	187	42.6	119	47.0	306	44.2
Republic of Ireland	109	46	64.8	8	21.1	23	41.8	31	57.4	54	49.5
United Kingdom	759	428	70.4	61	40.4	220	59.3	269	69.3	489	64.4
Total	2849	1052	54.6	373	40.5	785	46.2	640	55.6	1425	50.0

Overall pass rates varied by number of attempts (Table 6). First attempt candidates performed better than all other candidates. The differences between the pass rates by number of attempts was statistically significant. ($\chi^2=71.59$, d.f.=6, $p<.01$).

Within the comparison group UK ($\chi^2=47.49$, d.f.=1, $p<.01$), Republic of Ireland ($\chi^2=6.23$, d.f.=1, $p<.01$) and other ($\chi^2=5.67$, d.f.=1, $p<.05$) candidates were significantly more likely to pass on their first attempts.

Table 6: Paper 2 Pass Rates by Attempts

Attempts	Total N	Pass	%
1	1927	1052	54.6
2	581	262	45.1
3	211	81	38.4
4	83	17	20.5
5	35	10	28.6
6	8	2	25.0
7	4	1	25.0
Total	2849	1425	50.0

Binary logistic regression was carried out with the examination result as the dependent variable and age, gender, years since qualification and number of attempts as four independent variables. This tells us to what degree each predictor affects the outcome if the effects of all other predictors are held constant. This multivariate analysis revealed that passing Paper 2 was significantly associated with age, gender and attempts (Table 7). These factors accounted for 9.1% of the variance in candidates' scores. Figure 3 shows the classification plot of the probabilities of a candidate passing or failing.

Table 11 shows the number of candidates who sat and passed Paper 3 by medical school, attempt and gender. In the study period 4170 candidates sat the MRCPsych Paper 3 examination and 2258 of these passed (54.1%). The majority of those who passed did so on their first attempt (n = 1509, 61.0%). The pass rate for females was 59.1% and 51.2% for males. This difference was statistically significant ($\chi^2= 24.83$, $df=1$, $p<.01$).

Overall pass rates of a comparison group were analysed. This group consisted of UK, Indian Borders, Indian Sub-Continent, Republic of Ireland and all other candidates. The overall pass rate varied according to original medical school of training. The pass rate of candidates graduating from UK and Irish medical schools was 78.7% and 62.6% respectively. This compared with 38.2% for graduates from Indian Borders (Afghanistan, Pakistan and Nepal), 51.9% from the Indian Subcontinent (India and Sri Lanka) and 46.9% for the others. This difference was statistically significant ($\chi^2= 274.84$, $d.f. = 4$, $P < .001$).

Table 11: Paper 3 Pass Rates by Country with Attempts and Gender

Medical School	Candidates n	Pass attempt 1 n	%	Pass attempt 2 +	%	Male Pass	%	Female Pass	%	Total Pass	%
Australia & New Zealand	11	7	77.8	1	50.0	4	57.1	4	100.0	8	72.7
Central Africa	674	111	38.0	152	39.8	215	41.6	48	30.6	263	39.0
Central America	22	4	44.4	5	38.5	6	33.3	3	75.0	9	40.9
Europe (Non EU)	129	32	47.8	21	33.9	33	39.3	20	44.4	53	41.1
European Union	203	72	57.6	33	42.3	47	49.0	58	54.2	105	51.7
Middle East	176	42	46.7	36	41.9	56	48.7	22	36.1	78	44.3
North Africa	66	26	66.7	7	25.9	21	44.7	12	63.2	33	50.0
North America	2	2	100.0	-	-	-	-	2	100.0	2	100.0
South America	17	4	44.4	3	37.5	4	80.0	3	25.0	7	41.2
South East Asia	124	85	84.2	12	52.2	35	64.8	62	88.6	97	78.2
Southern Africa	59	32	72.7	8	53.3	20	83.3	20	57.1	40	67.8
Subtotal (Other)	1483	417	53.0	278	40.0	441	45.6	254	49.2	695	46.9
Indian Borders	437	75	37.9	92	38.5	122	38.6	45	37.2	167	38.2
Indian Sub-Continent	1311	398	54.7	283	48.5	449	50.7	232	54.6	681	51.9
Republic of Ireland	147	70	69.3	22	47.8	37	68.5	55	59.1	92	62.6
United Kingdom	792	549	83.3	74	55.6	290	73.8	333	83.5	623	78.7
Total	4170	1509	61.0	749	44.1	1339	51.2	919	59.1	2258	54.1

Overall pass rates varied by number of attempts (Table 12). First attempt candidates performed better than all other candidates. The differences between the pass rates by number of attempts was statistically significant. ($\chi^2= 114.69$, $d.f. = 6$, $p<.01$).

Within the comparison group UK ($\chi^2=50.48$, $d.f.=1$, $p<.01$), Republic of Ireland ($\chi^2=6.23$, $p<.01$), Indian subcontinent ($\chi^2=5.13$, $d.f.=1$, $p<.05$) and the other candidates ($\chi^2= 25.24$, $d.f.=1$, $p<.01$) were significantly more likely to pass on their first attempts.

Ethnicity

The overall pass rate varied according to ethnicity for all candidates. The pass rate for Chinese candidates was highest (83.5%) followed by White (70.8%), Mixed (70.2%), unknown (68.8%), Asian (49.7%), other (47.6%) and Black (40.4) (Table x). This difference was statistically significant ($\chi^2 = 117.96$, d.f. = 6, $p < .01$).

The overall pass rate varied according to ethnicity for UK PMQ. The pass rate for White candidates was highest (83.1) followed by Chinese (81.3%), Mixed (73.9%), Asian (68.5%), Black (68.4), Unknown (66.7) and other (61.9). This difference was statistically significant ($\chi^2 = 21.96$, d.f. = 6, $p < .01$).

Candidates were categorised into white and non-white. The pass rate for white candidates was 83.1% and 66.9% for non-white. This difference was statistically significant ($\chi^2 = 18.21$, $p < .01$).

Table 14: Paper 3 Pass Rates by Ethnicity

Ethnicity	All Candidates			UK PMQ		
	Total	Pass	%	Total	Pass	%
Asian	2104	1046	49.7	162	111	68.5
Black	727	294	40.4	19	13	68.4
Chinese	127	106	83.5	32	26	81.3
Mixed	57	40	70.2	23	17	73.9
Other	193	92	47.7	21	13	61.9
Unknown	32	22	68.8	9	6	66.7
White	930	658	70.8	526	437	83.1
Non-White Total	3208	1578	49.2	257	180	70.0
Total	3240	1600	49.4	266	186	69.9

Table 16 shows the number of candidates who sat and passed the CASC by medical school, attempt and gender. In the study period 3171 candidates sat the CASC and 1247 of these passed (39.3%). Just under half of those who passed did so on their first attempt (n = 858, 49.0%). The pass rate for females was 55.6% and 31.4% for males. This difference was statistically significant ($\chi^2= 171.57$, d.f.=1, $p<.01$).

Overall pass rates of a comparison group were analysed. This group consisted of UK, Indian Borders, Indian Sub-Continent, Republic of Ireland and all other candidates. The overall pass rate varied according to original medical school of training. The pass rate of candidates graduating from UK and Irish medical schools was 84.7% and 64.4% respectively. This compared with 26.8% for graduates from Indian Borders (Afghanistan, Pakistan and Nepal), 27.8% from the Indian Subcontinent (India and Sri Lanka) and 30.1% for the others. This difference was statistically significant ($\chi^2= 624.95$, d.f. = 4, $p<.01$).

Table 16: CASC Pass Rates by Country with Attempts and Gender

Medical School	Candidates n	Pass attempt 1 n	%	Pass attempt 2 +	%	Male Pass	%	Female Pass	%	Total Pass	%
Australia & New Zealand	8	5	83.3	0	0.0	2	40.0	3	100.0	5	62.5
Central Africa	428	40	20.7	46	19.6	67	18.2	19	32.2	86	20.1
Central America	16	2	28.6	2	22.2	2	20.0	2	33.3	4	25.0
Europe (Non EU)	80	17	40.5	12	31.6	16	34.0	13	39.4	29	36.3
European Union	126	40	50.6	20	42.6	23	41.1	37	52.9	60	47.6
Middle East	100	16	34.0	8	15.1	15	20.5	9	33.3	24	24.0
North Africa	48	16	53.3	5	27.8	16	47.1	5	35.7	21	43.8
North America	3	0	0.0	1	100.0	-	-	1	33.3	1	33.3
South America	6	4	80.0	1	100.0	3	100.0	2	66.7	5	83.3
South East Asia	107	15	30.6	7	12.1	8	13.8	14	28.6	22	20.6
Southern Africa	46	30	83.3	4	40.0	17	65.4	17	85.0	34	73.9
Subtotal (Other)	968	185	37.3	106	22.5	169	24.8	122	42.5	291	30.1
Indian Borders	291	36	27.9	42	25.9	50	21.8	28	45.2	78	26.8
Indian Sub-Continent	1267	172	30.1	180	25.9	214	23.3	138	39.4	352	27.8
Republic of Ireland	101	52	68.4	13	52.0	25	56.8	40	70.2	65	64.4
United Kingdom	544	413	86.2	48	73.8	210	81.4	251	87.8	461	84.7
Total	3171	858	49.0	389	27.4	668	31.4	579	55.6	1247	39.3

Overall pass rates varied by number of attempts (Table 17). First attempt candidates performed better than all other candidates. The differences between the pass rates by number of attempts was statistically significant. ($\chi^2= 174.37$, d.f. = 5, $p<.01$).

Within the comparison group UK ($\chi^2= 6.78$, d.f.=1, $p<.01$) and the other ($\chi^2= 25.34$, d.f.=1, $p<.01$) candidates were significantly more likely to pass on their first attempts.

The overall pass rate varied according to ethnicity for UK PMQ. The pass rate for White candidates was highest (89.3%) followed by Black (88.9%), Mixed (81.3%), Unknown (75.0%), Asian (74.8%), Other (71.4%) and Chinese (66.7%). This difference was statistically significant ($\chi^2=22.51$, d.f. = 6, $p<.01$).

UK PMQ candidates were categorised into white and non-white. The pass rate for white candidates was 89.3% and 74.7% for non-white. This difference was statistically significant ($\chi^2=19.27$, d.f.=1, $p<.01$).

Table 19: CASC Pass Rates by Ethnicity

Ethnicity	All Candidates			UK PMQ		
	Total	Pass	%	Total	Pass	%
Asian	1775	541	30.5	103	77	74.8
Black	470	103	21.9	9	8	88.9
Chinese	92	32	34.8	24	16	66.7
Mixed	47	25	53.2	16	13	81.3
Other	143	48	33.6	14	10	71.4
Unknown	24	11	45.8	4	3	75.0
White	620	487	78.5	374	334	89.3
Non-White Total	2527	749	29.6	166	124	74.7
Total	3171	1247	39.3	544	461	84.7

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