

Report on 1992 By-Laws case histories, clinical vivas and consultancy viva examinations

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An analysis was undertaken to provide information to the trainees, supervisors, the committees for training, examinations and the wider College Fellowship on some statistical aspects of the College examinations. An analysis like this contributes to the quality assurance activities of Committee of Examinations. When linked with training outcome data, the necessary next step, some useful information regarding determinants of success may arise. This report is timely as the College is in the midst of a process to review all aspects of training and examination.

CASE HISTORIES

All case histories submitted between 1995 and 1998 were used for this analysis. A total of 1425 were analyzed. The overall pass rate for the case histories was 91.9%. Chi-squared analysis revealed no significant association between pass rate and case type ($P = 0.811$), training branch of candidate ($P = 0.882$), or year of submission ($P = 0.106$).

VIVAS

All viva examinations taken under the 1992 By-Laws between May 1995 and October 1999 were available for this analysis. There were 323 individual candidates presenting on 446 occasions. Table 1 shows the breakdown of examination presentations according to the state in which the candidate was enrolled at the time of sitting.

OVERALL PASS RATES

At presentation at any one examination event, 59.0% candidates successfully completed all parts of the Section I examination.

Table 2 shows the total attempts that have been required to pass the Section I examination. Nearly 50% of candidates complete the examination, including cases, writtens and all vivas, at the first attempt; nearly 80% of candidates have passed the examination with one or less previous fails.

CLINICAL AND CONSULTANCY VIVA MARKS

The overall pass mark for the clinical (day 1) viva was 63.4%. 9.0% achieved an A mark, 25.5% B, 42.6% C. Candidates are assessed on two individual viva performances. Table 3 shows the combination of grades awarded for the two cases at each sitting. It shows that the most common combination of marks was B,C followed by C,C. There is a strong association between the mark attained between the two cases ($\chi^2 = 45.639$, $P < 0.0001$).

The consultancy viva (day 2) overall pass rate was 80.0%. 6.6% achieved an A mark, 26.6% B, 46.3% C.

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PASS RATE AND ATTEMPT NUMBER

Table 4 shows the pass rate according to the number of attempts at the clinical viva. The pass rate does not seem to be influenced by the attempt number. In the clinical viva, second and third time attempters do not have a worse success rate; the trend is to a

Table 1: Candidate numbers by state at the time of sitting

Candidate state	Number (%)
VIC	130 (29.1%)
NSW	109 (24.4%)
QLD	58 (13.0%)
NZ	57 (12.8%)
WA	40 (9.0%)
SA	27 (6.1%)
ACT	11 (2.5%)
TAS	6 (1.3%)
OTHER	5 (1.1%)
NT	3 (0.7%)
Total	446 (100.0%)

Table 2: Total attempts required to complete all parts of the Section I examination and the case histories

Total attempts required to pass all cases writtens and vivas	Number of candidates	Cumulative per cent
1	128 (48.7%)	48.7
2	79 (30.0%)	78.7
3	24 (9.1%)	87.8
4	12 (4.6%)	92.4
5	11 (4.2%)	96.6
6	3 (1.1%)	97.7
7	2 (0.8%)	98.5
8	1 (0.4%)	98.9
9	1 (0.4%)	99.2
12	1 (0.4%)	99.6
15	1 (0.4%)	100.0

higher success rate. Chi squared test shows no significant association with success rate and attempt number ($\chi^2 = 4.6$, $P = 0.462$). Similarly, there is no significant association with attempt number and pass rate in the consultancy viva ($\chi^2 = 5.2$, $P = 0.074$)

CANDIDATE STATE

Table 5 shows that pass rate of the two viva types according the state in which the candidate was enrolled at the time of sitting the examination. There is a weak association between candidate state and the pass rate for the clinical viva but not the consultancy viva (clinical viva: $\chi^2 = 17.4$, $P = 0.042$; consultancy viva: $\chi^2 = 11.0$, $P = 0.277$)

PLACE AND DATE SAT

Table 6 shows the pass rate according to the examination venue and the date in which a viva was sat. There is no statistical association between these variables and the pass rate (clinical viva: $\chi^2 = 4.8$, $P = 0.470$; consultancy viva: $\chi^2 = 4.7$, $P = 0.447$)

Table 7 shows the pass rates according to the date sat. There is a statistical association between the date

Table 3: Frequency of combined grades awarded for the two clinical vivas

	A	B	C	F
A	10	–	–	–
B	21	36	–	–
C	25	87	83	–
F	8	31	74	38

Table 4: Pass rates of clinical and consultancy vivas according to attempt number

Attempt number	Clinical viva result		Consultancy viva result	
	Pass	Fail	Pass	Fail
1	167 (61.2%)	106 (38.8%)	223 (81.4%)	51 (18.6%)
2	61 (64.2%)	34 (35.8%)	38 (70.4%)	16 (29.6%)
3	20 (74.1%)	7 (25.9%)	7 (100.0%)	
4	10 (71.4%)	4 (28.6%)		
5	3 (100.0%)			
6	1 (100.0%)			
Total	262 (63.4%)	151 (36.6%)	268 (80.0%)	67 (20.0%)

sat and the clinical viva but not the consultancy viva (clinical viva: $\chi^2 = 25.8$, $P = 0.018$; consultancy viva: $\chi^2 = 18.0$, $P = 0.117$). The association between date sat and clinical viva pass rate is not present when the 1995 results are excluded ($\chi^2 = 11.84$, $P = 0.375$).

DISCUSSION

Widely held beliefs about the examination process include that the examinations vary in pass rate according to the place they are held, the pass rate has declined over the years, and candidates that fail at first are doomed to repeated failure. Pass rate estimates vary from 10% to 50%. These beliefs commonly arise from sketchy information, often anecdotal. This analysis assists to better inform those involved with College examinations.

The examination process is of course rigorous and challenging to all trainees but it is encouraging to note that nearly four out of five candidates complete the examination, with at most one fail which may be in either one case, a written paper or one viva. It is also encouraging that candidates re-presenting for the vivas have the same if not slightly better success rate as first presenters. This improved pass rate with subsequent attempts did not reach statistical significance, most probably because of the small numbers used in this particular analysis.

A project is currently being undertaken to examine in detail the determinants of success in completing the RANZCP training and examinations require-

ments. The finding that the clinical viva pass rate is associated with candidate state is interesting although limited as it only accounts for the state in which the candidate was located at the time of sitting and not where the training took place. Many candidates were exemptions candidates not formally

Table 5: Pass rate of clinical and consultancy vivas according to candidate state

Candidate State	Clinical viva result		Consultancy viva result	
	Pass	Fail	Pass	Fail
VIC	76 (61.8%)	47 (38.2%)	73 (79.3%)	19 (20.7%)
NSW	67 (68.4%)	31 (31.6%)	73 (83.0%)	15 (17.0%)
QLD	37 (69.8%)	16 (30.2%)	36 (83.7%)	7 (16.3%)
NZ	32 (58.2%)	23 (41.8%)	29 (70.7%)	12 (29.3%)
WA	23 (63.9%)	13 (36.1%)	25 (83.3%)	5 (16.7%)
SA	19 (76.0%)	6 (24.0%)	20 (87.0%)	3 (13.0%)
ACT	5 (55.6%)	4 (44.4%)	6 (66.7%)	3 (33.3%)
OTHER	2 (40.0%)	3 (60.0%)	2 (100.0%)	
NT	1 (33.3%)	2 (66.7%)	2 (100.0%)	
TAS		6 (100.0%)	2 (40.0%)	3 (60.0%)
Total	262 (63.4%)	151 (36.6%)	268 (80.0%)	67 (20.0%)

Table 6: Pass rate of clinical and consultancy vivas according to examination venue

Place sat	Clinical viva result		Consultancy viva result	
	Pass	Fail	Pass	Fail
Adelaide	63 (61.8%)	39 (38.2%)	70 (81.4%)	16 (18.6%)
Brisbane	56 (71.8%)	22 (28.2%)	55 (83.3%)	11 (16.7%)
Melbourne	49 (59.8%)	33 (40.2%)	52 (75.4%)	17 (24.6%)
New Zealand	28 (63.6%)	16 (36.4%)	26 (72.2%)	10 (27.8%)
Perth	34 (56.7%)	26 (43.3%)	38 (79.2%)	10 (20.8%)
Sydney	32 (68.1%)	15 (31.9%)	27 (90.0%)	3 (10.0%)
Total	262 (63.4%)	151 (36.6%)	268 (80.0%)	67 (20.0%)

Table 7: Pass rate of clinical and consultancy vivas according to date of examination

Date sat	Clinical viva result		Consultancy viva result	
	Pass	Fail	Pass	Fail
May 95		4 (100.0%)		
Oct 95		4 (100.0%)	2 (100.0%)	
May 96	5 (83.3%)	1 (16.7%)	5 (83.3%)	1 (16.7%)
Jul 96	1 (33.3%)	2 (66.7%)	1 (100.0%)	
Oct 96	12 (48.0%)	13 (52.0%)	17 (70.8%)	7 (29.2%)
May 97	20 (55.6%)	16 (44.4%)	24 (88.9%)	3 (11.1%)
Jul 97	4 (80.0%)	1 (20.0%)	5 (83.3%)	1 (16.7%)
Oct 97	32 (76.2%)	10 (23.8%)	27 (90.0%)	3 (10.0%)
May 98	34 (60.7%)	22 (39.3%)	36 (78.3%)	10 (21.7%)
Jun 98	14 (70.0%)	6 (30.0%)	13 (92.9%)	1 (7.1%)
Oct 98	51 (70.8%)	21 (29.2%)	50 (83.3%)	10 (16.7%)
May 99	37 (64.9%)	20 (35.1%)	35 (77.8%)	10 (22.2%)
Jun 99	9 (56.3%)	7 (43.8%)	7 (46.7%)	8 (53.3%)
Oct 99	43 (64.2%)	24 (35.8%)	46 (78.0%)	13 (22.0%)
total	262 (63.4%)	151 (36.6%)	268 (80.0%)	67 (20.0%)

in any training program. In the future, it may be more valid to look at variations between training zones or participation in teaching programs rather than making gross statewide comparisons. Information regarding how long it takes to complete the training program or how many trainees that commence training actually finish, is not readily available at this stage.

As many would be aware, the College is involved in a considerable revision of training and examination procedures. This report is timely as it may help in the current revision of the training program.

Before we change, we best know what it is that we have been doing.