


2001 EARLY ENTRY PROGRAM

ANALYSIS EXECUTIVE SUMMARY

University of Wollongong	
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This report considers students who applied for Early Entry in 2001 and did their first year of study in 2002. In order to make meaningful statements about the performance of these students, we have used as Controls those students who were admitted through UAC to the first year of any Informatics degree at the beginning of 2002 but had not applied for Early Entry. There were 279 students considered: 79 granted Guaranteed Enrolment, 46 granted Conditional Enrolment, and 154 Controls.

SOME SUMMARIES

Comparing the UAIs of EE Students (before eliminating 5 students) with the Cutoff.

Category	Frequency	Percent	Cumulative Frequency	Cumulative Percent
UAI > Cutoff	80	61.54	80	61.54
UAI < Cutoff	48	36.92	128	98.46
UAI = Cutoff	2	1.54	130	100.00

The five students eliminated from consideration consisted of three who transferred to the B Commerce and two who withdrew.

Comparisons of the average marks of Early Entry students (Guaranteed and Conditional combined) with those of the Controls. It's not enough just to look at the means (averages) and say "Oh, this group's average is greater than that group's average" – you need to see if one average is *statistically significantly* greater than another. (This concept takes into account the variability in the data from the two groups, and the effect that this has on the confidence you can have that what seems to be happening is *really* happening. If there's virtually no variability, you can be fairly confident that two means that differ indicate a real difference but, if there's large variability, the observed averages need to be much further apart before you can be confident of any conclusion about there being real differences.) When averages are reported to be *statistically significantly different*, the test has always been performed at the (conventional) 5% level of significance. That is, if there truly is no difference between the averages of the entire collections of scores (UAIs, marks, ...) of two groups, there is a 5% risk that, because of the fact that we took only samples from those collections, the incomplete picture will cause us to decide (wrongly) that there is a real difference between the averages.

The Tables provide, for each group, the values of N (number of people), the means (averages), and the standard deviations (measures of variability: the larger the standard deviation, the greater the variability). The first Table compares all students:

Variable: Early Entry		N	Mean	Standard Deviation
Average Mark	Early Entry	125	64.398	14.564
Average Mark	Non-Early Entry	154	56.207	14.861

The difference between the averages, 8.191, is statistically significantly greater than 0. That is, the Early Entry people overall had a significantly greater average mark than the non-Early Entry people (averaged over all subjects). As we will see below, this seems to arise from the Male students only. Now we make the same comparisons for females and males separately:

FEMALES Variable: Early Entry		N	Mean	Standard Deviation
Average Mark	Early Entry	16	63.413	17.332
Average Mark	Non-Early Entry	31	59.295	14.854

The difference between the averages, 4.118, is not statistically significantly different. So we can't say that it's a statistically 'real' difference (but it is in the right direction).

MALES Variable: Early Entry		N	Mean	Standard Deviation
Average Mark	Early Entry	109	64.543	14.2
Average Mark	Non-Early Entry	123	55.429	14.821

The difference in average marks, 9.1144, is very statistically significantly different. The male Early Entry students obtained a higher average mark (over all subjects) than the male non-Early Entry students.

Now the same comparisons are made for UAI. First we compare the mean UAI for all Early Entry students with the mean UAI for those who did not get Early Entry:

Variable: Early Entry		N	Mean	Standard Deviation
UAI	Early Entry	125	83.161	15.331
UAI	Non-Early Entry	154	78.465	8.5528

The difference between the averages, 4.696, is very statistically significantly different. Overall, the Early Entry students obtained a statistically significantly greater UAI than the non-Early students. However, as we will see in the next two comparisons, this difference seems to come from the UAIs of the Male students, not the Female students.

FEMALES		N	Mean	Standard Deviation
Variable: Early Entry				
UAI	Early Entry	16	77.55	24.152
UAI	Non-Early Entry	31	80.274	8.0227

The difference between the average UAIs, -2.724, is not statistically significant. That is, although the average for the early Entry students was slightly below that of the non-Early Entry group, the difference (relative to the variability in UAIs) was not great enough for us to be able to say that the difference is 'real'.

MALES		N	Mean	Standard Deviation
Variable: Early Entry				
UAI	Early Entry	109	83.984	13.547
UAI	Non-Early Entry	123	78.009	8.6527

The difference in the averages, 5.975, is very statistically significantly different. The male Early Entry students had an average UAI that was statistically significantly greater than the average for the non-Early Entry students.

There are dangers in making comparisons for all subjects grouped (as one gender may take 'harder' subjects than the other, and this may distort the picture). The complete report makes comparisons for 34 subjects. A subject was not considered unless there were at least 10 students enrolled, and there were more than two in each of the three enrolment categories.

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