



Utility of a brief selection device into an accredited program in the private HEP sector:  
Evidence of reliability and predictive validity

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## Retention

- The never ending issue of retention of students upon enrolment
- Is retention a greater issue for private providers compared with universities?


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## Selection in a private HEP

- What is the reputation of private providers in the higher education sector in Australia?
- Accept anyone and everyone regardless of ability or aptitude?
- What about entry into an accredited course with necessary standards of quality of selection and of delivery?
- What results from the role of TEQSA in the establishment of standards of selection of students enrolled in the course?
- How does one ensure adequate retention rates through the course to satisfy receipt of a quality rating either by TEQSA or in the *Good Universities Guide*?


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## Selection in a private HEP

- Australian College of Applied Psychology a provider of higher education for thirty years
- Member of the *Navitas* group, a high quality educational establishment, listed in the top 100 companies in the *ASX*
- Psychological Sciences program accredited by the Australian Psychology Accreditation Council in 2010 to deliver a three year undergraduate program commencing in 2011.
- Cannot afford a poor reputation for quality and retention in a business sense


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## Selection in a private HEP

- How to satisfy the demands of provision of good quality of education to a cohort of students who are able to benefit from the experience
- At the same time as providing an opportunity to as many students as possible to benefit from that experience
- Optimise enrolment and retention without compromising the business case

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## Selection into Bachelor of Psychological Science

Two modes of entry into Bachelor of Psychological Science

- School Leaver: based upon minimum entry ATAR score of 65
- Mature Age and School Leaver with ATAR < 65:
- Two stage process;
  - Submission of 500 word statement about what they believed the study of psychology to entail and why they wished to do psychology
  - Telephone interview

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## Psychology Selection

- Decision was taken to use the provision of a 500 word statement
- Increase awareness of students of the nature of an accredited psychology course
- Quantify this process to enable validation of the process against later performance of students
- Enable the possible eventual development of selection cut-offs to allow the exclusion of applicants on clear criteria
- A particular benefit of this pilot scheme was that no student could be **rejected** on the basis of the data obtained. We have a full sample in the unit of all students who have applied, with their performance outcomes, and not only those who may have been selected according to the set criteria.

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## Psychology Selection

- 500 word statement for student to state:
  - What they believed the discipline of psychology to entail, in particular the scientific nature of the discipline, its evidenced based structure and the utility of data analytic tools
  - Differentiation of psychology from cognate disciplines such as counselling
  - What they knew about the pathways required in order to achieve registration as a psychologist, including an awareness of the time required for that achievement

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## Selection

Initial statements rated on 4 scales

**Clarity:** Ability to make clear understanding of the knowledge skills needed for completion of a Psychology degree and the nature of psychological science taught in the degree

**Goals:** Depiction of the goals towards which the degree will lead

**Differentiation:** Ability to distinguish between training in psychology and related fields such as counselling

**Fluency/literacy:** Evidence of writing ability and clarity of expression.

Rated independently by two raters on the four x three point scales;

**Unsatisfactory Satisfactory Good/Excellent**

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## Selection

- **Interviews**
  - 15 minute interviews (by telephone) by the same two members of staff who had rated the statements.
  - Ratings of interviews made immediately after completion of each interview.

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## Selection

Three questions posed to each candidate initially;

- Please summarise your previously submitted statement and perhaps expand upon it if you wish;
  - Included as a possible check on possibility that the statement had been written by someone other than the student
- "Psychology requires the development of skills in the acquisition of evidence upon which to make decisions and actions, including statistical techniques. Do you think that you will be able and equipped to develop skills in this area?
  - Included to alert the student to the fact that a large proportion of the degree curriculum is concerned with data analysis and this may be incongruent with expectations of the student as to what constitutes psychological science.
- What are your goals after completion of the three year sequence?
  - Designed to alert student to the long process to become a registered psychologist

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## Selection

- Each candidate rated on five point scales on answers to each of the three questions plus a rating on *Clarity of Responses*
  - Very poor poor neutral good excellent

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## Data analysis: Reliability

- **Internal consistency of ratings of statements**
- Item/total correlations for both raters

Rater #1 / #2	Question				
	Item 1	Item 2	Item 3	Item 4	Total
Item 1		.69/.76	.81/.84	.58/.59	.82/.92
Item 2			.74/.77	.67/.59	.89/.90
Item 3				.60/.53	.90/.91
Item 4					.82/.76

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## Data analysis: Reliability

- Internal consistency of ratings of **interview responses**
- Item/total correlations for both raters

Rater #1 / #2	Question				
	Item 1	Item 2	Item 3	Item 4	Total
Item 1		.65/.67	.55/.70	.63/.82	.82/.89
Item 2			.60/.65	.74/.71	.88/.85
Item 3				.68/.75	.81/.88
Item 4					.90/.92

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## Inter-Rater Consistency

- **Mean Ratings of Statements**  $r = .77$
- **Mean Ratings of interviews**  $r = .75$

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## Do these tools have any predictive value?

### Measures of Performance

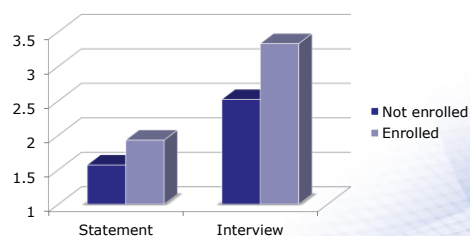
- Non-enrolment in the course: Difference between enquiry and eventual enrolment
- Early withdrawal from a unit
  - Coded according to whether they completed both assignments (due by week 6) or withdrew before completion of both
- Performance on the first and second assignment
  - A measure of early performance in a unit
- Examination Performance
  - Measure of performance on a multiple choice examination
  - Measure of performance in non-Psychology elective units

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## Enrolment versus non Enrolment in Course



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## Enrolment versus non-enrolment in course

- Candidates who did not pursue their enquiry about the course into an enrolment in the first year units after interviews were rated significantly more poorly on both the statements and the interview performance than those who did enrol.

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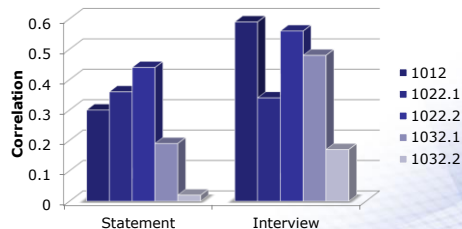


### Predictions of early withdrawal

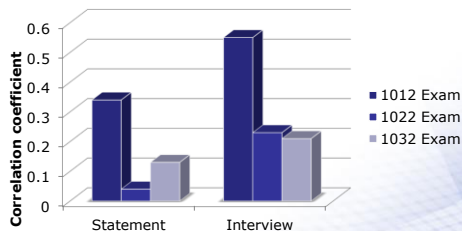
	Statement Ratings	Interview Ratings
Correlation with Withdrawal	.24	.33 (p<.05)



### Prediction of Performance on Assignments



### Prediction of Psychology Exam Performance

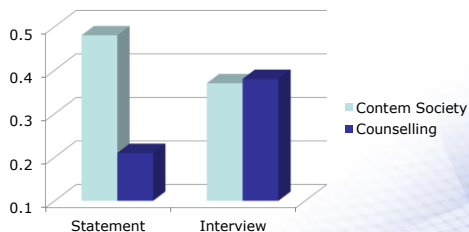


### Psychology and non Psychology Performance

	1012	1022	1032	Contemporary Society	Counselling
1012 Exam	-	.60	.49	.68	.52
1022 Exam	-	-	.29	.54	.81
1032 Exam	-	-	-	.34	.50
Social Science	-	-	-	--	.69
Counselling	-	-	-	-	-



### Prediction of Non Psychology Exam Performance



### Summary

- Ratings of both statements and interviews can be reliably achieved
- Ratings predict non-transfer of enquiry into enrolment
- Interview ratings that indicate likely poor performance predict early withdrawal from the unit
- Ratings predict performance
  - Interview ratings predict performance in the assignments and examinations
  - Measures predict performance in non-psychology elective units
  - Statements and interviews are specific to psychology but performance generalises to non-psychology performance



## Commentary

- Reliability and predictive validity can be achieved
- Ratings of statements and of interview performance make separate predictions of eventual performance
- Data may be used to help advise students and to help them choose alternate programs of study
- Data enables students who may be especially at risk to be identified and to be provided with learning support
- Process provides a version of a *passive* selection device with differential student translation from enquiry into enrolment predicted by statement and interview performance

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## Financial consequences

- 25% of students in initial enrolment in first year psychology fail (mainly due to failure to complete all assignments)
- Interview results in 25% of inquiries not translated into enrolments
- Interviews predict 10% of enrolments not to be completed
- Interviews predict the majority of students not likely to proceed
- Potential loss of revenue of approximately 75-100 modules per annum
- Saving of reputation, costs of provision of learning support and staff time to enhance student experience of successful students

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