Admission and success for low SES university students

Report on a HEPPP 2018 National Priorities Pool Project

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It will be more informative if citations refer to chapters within the report. For example, Chapter 1 can be cited as:

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Chapter 8

The University of Melbourne: a traditional model

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Of the four universities in the study, Melbourne represents the traditional end of the spectrum. The demographic characteristics, reported in Table 3.1, show that it has a more traditional model of student intake. As all students are taught on-campus, mode of study did not appear in the hypothesised model. While all undergraduate students initially enrol as full-time, a number subsequently did not enrol for enough units to meet the full-time load requirement. For modelling purposes, values for proportion of full-time load were extracted from the database so the variable could be included in the model.

Sample

The sample for this study was undergraduate students enrolled in the following bachelor degree programs:

- Bachelor of Arts

- Bachelor of Biomedicine

- Bachelor of Commerce

- Bachelor of Fine Arts Specialisations

- Bachelor of Fine Arts Music Specialisations

- Bachelor of Oral Health Study Areas

- Bachelor of Science

The four degrees with high enrolments were the Bachelor of Arts, Bachelor of Biomedicine, Bachelor of Commerce and Bachelor of Science. Most of the entrants were admitted based upon their secondary school results (87.2%). The vast majority were under the age of 24 (96.1%). Only a very small percentage were living in outer regional, remote or very remote areas (2.5%). The sample size was 17,025.

Overall model

The refined model, after the addition of a path between proportion of full-time load and year of study based upon the modification indexes, shows a very good fit to the data. CFI = 0.959, SRMR = 0.035 and RMSEA = 0.059. All paths but one were statistically significant. The one not statistically significant was that between remoteness and age.

The good fit of the model shows that it is a statistically significant predictor of outcomes. The proportions of variance of the dropout, course weighted average, and proportion of units completed were: .35, .02 and .00.

Figure 8.1: Standardised solution for the University of Melbourne
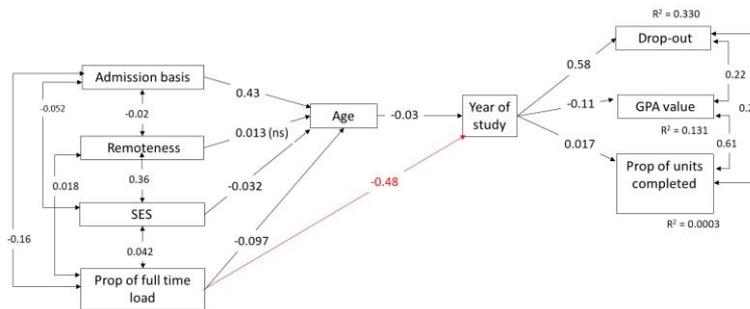
The overall model for Melbourne can be contrasted with that for UTAS. This comparison contrasts the traditional end of the spectrum with the contemporary end. The most obvious difference between the two models is that mode of study does not feature in the Melbourne model, as there was judged to be insufficient variance in the mode of study to include it in the baseline model.

As well as having one very important variable less, the Melbourne model is clearly simpler than the UTAS one. There are fewer paths and fewer intercorrelations. The traditional model of higher education is simpler than the contemporary model. As higher education has moved away from the traditional model it has become more complex. The complexity may imply that measures of support, which were appropriate and successful for the traditional model, are no longer appropriate.

Basis of admission

The path from basis of admission to age has a much stronger standardised coefficient than that for the other three presage variables. The basis of admission has a small impact on retention, such that those who enrol form secondary education have a small, but statistically significant, higher chance of completion than those not from secondary education.

Remoteness

The path from remoteness to age is non-significant. The lack of impact of remoteness must be because of the very small proportion of students with term addresses which are not Major City or Inner Regional.

There is a moderate intercorrelation between remoteness and SES. The explanation for the intercorrelation may lie in the coding of SES from home address and that for remoteness from the term address. There are inner-city areas of Melbourne which are classified as low SES. These areas are popular for student accommodation. Students whose homes are in areas remote from the campus could reside in these inner-city low SES areas in term time.

SES

SES has a path to age with a small, but statistically significant, standardised coefficient, such that older entrants tend to have a lower SES. It has significant intercorrelations with the other three presage variables. The intercorrelations with basis of admission and percentage full-time load are small, while that to remoteness is moderate. SES has little or no impact on the outcome variables.

Proportion of full-time load

Proportion of full-time load has the strongest impact of the precursor variables on the outcome variables. There is a relatively strong, statistically significant, link between proportion of full-time load and dropout. Those students with a full-time load are more likely to dropout that those with a part-time load. There is, however, a small and statistically significant link between proportion of full-time load and course weighted average. Those with a full-time load are more likely to have higher levels of achievement. With the relatively strong, and statistically significant, link between year of study and dropout such that first year students are much more likely to drop out that later year students, it may well be that the lower achieving students in first year are those dropping out.

Age

The path from age to year of study has a very small, but statistically significant, standardised coefficient. This partially explains why the three precursor variables – basis of admission, remoteness and SES – has little impact on the outcome variables. The relatively strong link between percentage full-time load and year of study explains why percent of full-time load does have impact on two of the three outcome variables.

The explanation for this may be the restricted age range of Melbourne undergraduates. With only 3.9% older than 24, the large majority must enter straight from school. As most take a full-time load, their age on completion is also low compared to the other three universities. The impact of maturity as an intervening variable is, therefore, restricted. Admission as mature students is normally conditional on age being greater than 24 as impacts of greater motivation and enhanced use of a deep approach (Jelfs & Richardson, 2013; Ke & Xie, 2009; Richardson, 1994; Richardson, 2013; Richardson & King, 1998) do not normally start to impact without the life experience which comes later on.

Intervening variables

Despite age or maturity playing less of a role than at the other three universities, the model still functions as a longitudinal path model. All effects go through the intervening variables. There are no direct paths from presage to outcome variables.

Outcome variables

Again, the model is a better predictor of attrition than the other two outcome variables. In spite of the percentage dropout being very low, the model does indicate how the other variables in the student record system impact upon it.